

Indian Museum Bulletin  
2000 — 2001

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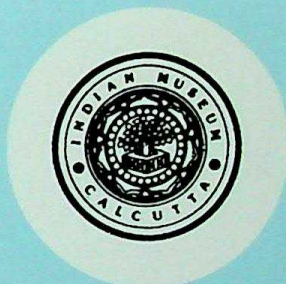




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# INDIAN MUSEUM BULLETIN



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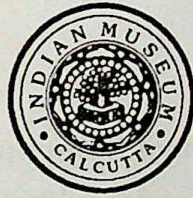






# INDIAN MUSEUM BULLETIN

2000



CALCUTTA



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## Editorial Note

This issue of the Indian Museum Bulletin incorporates contributions relating to epigraphic and numismatics studies; minor antiquities such as beads; iconography; rock paintings; Shaiva religion; Vaisnava and Buddhist themes on Indian and Tibetan paintings; prehistoric scenes of Bengal; ethno-botany, conservation and display of plant-resources; social institutions and democratic ideas of Indian tribes; as also music and museological studies. Noteworthy among these articles are two papers dealing with Kharoshti and Brahmi inscriptions prevalent in ancient Bengal. A study of the auspicious symbols on a large footprint of Buddha measuring seven feet six inches, acquired by the Indian Museum in 1853 from Yangon is interesting. That the democracy in traditional tribal society, particularly in the north-east region of the country had a strong base, is reflected in one of the research papers published in this volume. The necessity for revealing the art and culture of the north-eastern tribes as well as exposing the collections of ornaments of this region as preserved in the Indian Museum, is marked in two papers of this Bulletin. A university museum in Bangladesh, a private museum built by singular effort and generation of resources for museums have been discussed in a few articles published in this number. A note on trap rocks examined during the geological field work at Rajhmal deserve attention of scholars interested in the field.

We again request the publishers and authors to send their publications for review in the forthcoming Bulletin.

November, 2000  
Indian Museum, Calcutta

**Shyamalkanti Chakravarti**  
Director • Secretary







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## THE GOSABA RUPEE AND SIR DANIEL HAMILTON

Vasant Chowdhury

Around 1880, at the age of twenty, Daniel Hamilton joined his family enterprise in India - McKeen & Mackenzie Company who were the sole agent of P. & O. Liner and in due course became the chief of the organisation, in India.

In the early part of twentieth-century he took lease of three islands — Gosaba, Rangabelia and Satjelia — under the zamindari system management. These are the delta islands formed at the meeting point of Bhagirathi and Bay of Bengal. The combined area covered about 25000 acres of land which consisted only of dense forests with wild life. He cleared-up the forests distributing lands and initiated human settlement. Sir Daniel conceived a model habitation programme incorporated with co-operative scientific system. The inhabitants largely benefitted from this system and in due course of time 'The Gosaba Central Co-operative Bank' was formed. Rabindranath Tagore, who had already experimented with similar activities at his agricultural centre 'Sri Niketan' was invited by Sir Daniel to Gosaba for the latter's valuable advice and opinion. Tagore visited Gosaba accompa-

nied by Kali Mohan Ghosh, on 29th December 1932 and lived in a wooden bungalow specially built for him.

Sir Daniel passionately argued with Sir James Greek, Director, Department of Finance for the introduction of one rupee currency notes in order to enhance the purchasing capacity of the Indian farmers at large, which vicariously resulted in 1935 in British India issue one-rupee notes. And in the following year Sir Daniel also introduced one-rupee notes for circulation in his zamindari through his co-operative bank which is probably example of an unique attempt of experiment of regional monetary system in a zamindari.

We are extremely grateful to late Dr. Gopi Nath Burman of Gosaba for showing the specimens of these old notes. To the best of my knowledge no systematic investigation has been carried out in the past hence information regarding these notes are rather scanty. After a thorough scrutinization of these notes, the following conclusions might be drawn as elucidated below :

- i) The look of these notes are similar to



cheque-books where the transactional part was torn-off and the counterfoil was retained and each book contained fifty pages ( $A_1 - A_{50}$ )

- ii) Though there is no record of where the notes were printed, whatsoever, it could be presumed that they were printed at Mr. N. N. Mukherjee's 'Art Press' of British Indian street, who were the regular printers of the zamindari.
- iii) Coming back to the notes, they were issued in two different series —  $A_1 - A_{50}$  to  $Z_1 - Z_{50}$  and  $AA_1 - AA_{50}$  to  $AZ_1 - AZ_{50}$  i.e.

I)  $A_1 - A_{50}$  to  $Z_1 - Z_{50}$  = Number 1300

II)  $AA_1 - AA_{50}$  to  $AZ_1 - AZ_{50}$  = Number 1300

The details of dates and numbers regarding the issue of these as derived from the analysis are given below :

Dates of Issues	Series Number	Number of Issues
08.02.1936	A, B, C, D, E	250
22.02.1936	F, G, H, I	200
29.02.1936	J	50
14.03.1936	K, L	100
21.03.1936	M, N	100
11.04.1936	O, P, Q, R, S, T	300
09.05.1936	U, V	100
		<u>1100</u>

From the table we observe that during the mentioned span of time (February to

May, 1936) i.e. within four months' duration 1,100 paper-notes were issued. Also it has been noticed that the bank has re-issued the notes with a fresh date-stamp for re-circulation when these notes returned to the bank. It is worth stating here that there are examples of notes bearing six or seven consecutive issuing dates. This process of circulation continued for a period of two and half years and then it became necessary for induction of new notes.

Hence in December 3, 1938 a bunch of fresh series was issued as follows :

Date of Issue	Series Number	Number of Issues
03.12.1938	W, X, Y, Z, AA, AB, AC, AD AE, AF, AG, AH AI, AJ	700

There was no issue after this.

Thus, finally we arrive at the conclusion that 1,800 (1100+700) notes were put into circulation.

Since there are no subsequent issuing date-stamps on the last set of notes released on 03.12.38, it could be summarily assumed that these notes did not circulate for long. We are, however, still not quite sure that whether the discontinuation of the notes had any connection with the declaration of the World-War-II (1939). The remaining set of 800 notes was most possibly never put into circulation excepting as souvenir pieces, given away from time to time.



## THE PERIOD OF INTRODUCTION OF KHAROSHTĪ IN ANCIENT VAṄGA

B. N. Mukherjee

There is an interesting terracotta object in the collection of Dr. G. S. De of Habra. It is small in size and is nearly oval in shape. It bears a stamped inscription in a square incuse. Outside its border there are traces of an engraved inscription (fig. 1).

The stamped inscription consists of only two lines. A *yūpa*-like device is displayed at about the middle of the incuse, created by the stamping of the seal matrix on the clay object.

The first letter of the stamped inscription is Brāhmī *bha* with the sign of medial *ā*. The next two letters are Brāhmī *sa* and *ha*. The second line has two characters — Kharoshtī *tha* and Brāhmī *na*. So the inscription can be read as *Bhāsahathana*. (fig. 1). The *yūpa*-like object touches the top of the vertical line of *na*.

The expression *bhāsaha* may be connected with Sanskrit *bhāsaka*, meaning *inter alia* "enlightening",<sup>1</sup> through the intermediary form *bhāsakha* (*bhāsaka* > *bhāsakha* > *bhāsaha*).<sup>2</sup> The second line *thana* (< *sthāna*) may denote "a place" or "an office".<sup>3</sup> So *bhāsahathāna* (< *bhāsakasthānam*) may refer to

"an enlightening place (or office)". It could have been a place of worship or a place for preaching religion (which enlightened the students) or an administrative office (which enlightened people with administrative information).

Of all the letters in the inscription the dental *sa* has a peculiar form. In the early forms of *sa*, the small hook-like curve (in addition to the letter's curved bottom) is generally seen attached to the lower section of the vertical line of the concerned character.<sup>4</sup> But in the present case the attachable curve does not appear. Its presence is indicated only by continuing slightly in a slanting manner the lowest section the vertical line (Ψ). This special form of *sa* or its close variations can be noticed on some north Indian coins of c. 2nd or 1st century B.C.<sup>5</sup> and in one of the shapes of the letter concerned in a short Nanaghat inscription<sup>6</sup> and in the Nasik inscription of the Sātavāhana king Kṛishṇa,<sup>7</sup> both found in western Deccan and both datable to the late 1st century B.C.<sup>8</sup>

The form of the letter *sa* on our seal may therefore be dated to c. late 1st century B.C.



However, we may have to concede the feasibility of the use of the form in question in an area like lower West Bengal (then included in Vaṅga)<sup>9</sup> in a slightly later period, as it was far away from the above noted zone of occurrence of the concerned shape of *sa*. Nevertheless, since the special form has not yet been noticed in any other inscription from that territory, the date of the use of the form of *sa* in question in ancient Vaṅga cannot be placed later than the early 1st century A.D. So the seal can be placed in the early 1st century A.D. or by A.D. 50.

The inscription engraved outside and above the stamped incuse is legible if it is read from outside. It can be read as *Bramosa*, meaning "of Bramo or Brama" (Brahmā?). Brahma (Brahmā) was perhaps the name of the owner or issuer of the seal impression. The inscription, which consists of only Kharoshṭī letter, has the mouth of dental *sa* completely closed. This feature tends to date the seal impression not later than the 1st century B.C. or very early 1st century A.D.<sup>10</sup>

The evidence of the seal is of outstanding importance in determining the approximate date of introduction of the use of Kharoshṭī in ancient Vaṅga. We have earlier adduced reasons for the hypothesis about the first use of Kharoshṭī in Vaṅga in about the later half of the 1st century A.D.<sup>11</sup> And since some time must have elapsed after the introduction of Kharoshṭī and the beginning of its use in a mixed script (consisting of Kharoshṭī and Brāhmī letters) in that territory, we suggested the late 1st or early 2nd century A.D. as the feasible period for the first use of the mixed script.<sup>12</sup>

The evidence of the seal impression now suggests that the Kharoshṭī-Brāhmī script was already in use in Vaṅga in about the 1st century B.C. or early 1st century A.D. Hence Kharoshṭī should have been introduced in that area by sometime of the 1st century B.C.

In this connection we may draw attention of scholars to a grayish clay object of art found in the Chandraketugarh area of the district of 24 Parganas (North), West Bengal and now preserved in the State Museum, Calcutta (accession no. 99.66). It is nearly round in shape (28 cms. 23 cms.). It displays in three different panels, a stylised lotus, the figure of Herakles, seated on a rock and holding a club, and a standing lady wearing a scytho-Parthian or Central Asian dress and a *polos* head-dress and holding a cornucopia(?) by her left hand and a fillet by her half-raised right hand. There is a Kharoshṭī inscription across the object, which can be read as *Yakhre Hejasa*, meaning "of Yakha (i.e. Yaksha) Heja". Here the term *yaksha* (alluding to *inter alios* an attendant of Kubera, the god of wealth) may indicate "a rich man". Thus the object of art belonged to a rich person.

The appearance of the Hellenic deity Herakles alludes to the influence from the direction of north-west of the sub-continent,<sup>13</sup> where seated Herakles is noticeable on coins of the Indo-Greek and Scytho-Parthian rulers. The last ruler who used the "seated Herakles" coin-type was the Scytho-Parthian King Azilises, who ruled in about the last quarter of the 1st century B.C.<sup>14</sup> Seated Herakles is not known to have ap-



peared on Kushāṇa coins or in Gandhāra art of the Kushāṇa age. Hence the object is to be dated to about the period of Azilise's, i.e. c. last quarter of the 1st century B.C. The Scytho-Parthian dress of the lady, which has the head-dress and fillet of the Hellenic or Hellenistic city deity Tyche and the cornucopia of the goddess Demeter of the same pantheon, can be identified as Tyche-Demeter or the syncretistic deity's Indianised version Nagara-Lakshmī.<sup>15</sup> In any case the Scytho-Parthian dress of the deity is not against the ascription of the object to the late 1st century B.C. The same inference may be drawn from the evidence of the letter *sa*, with its mouth partly open.

The object and so also the Kharoshtī inscription may be dated to the late 1st century B.C. So the Kharoshtī script should have been introduced in the area concerned by about the last quarter of the 1st century B.C.

This inference is supported by a small number of Kharoshtī inscriptions on seal impressions found in the Chandraketurgarh area. Here the mouth of the letter *sa* is slightly closed. This feature was popular in the north-west in the 1st century B.C., though it continued also in the 1st century A.D. Nevertheless, the evidence of this feature in the Kharoshtī inscriptions concerned (like the one numbered 99.59 in the collection of the State Museum, Calcutta) may indicate the feasibility of placing them in 1st century B.C.

It appears that traders from the north-west used to visit or even settled in Vaṅga from about the late 1st century B.C. The immigrants should have introduced Kharoshtī in Vaṅga soon after their advent in that area. They evolved the mixed script in that territory by about the late 1st century B.C. or rather in early 1st century A.D.

## NOTES

1. M. Monier Williams, *A Sanskrit-English Dictionary*, reprint, Oxford, 1960, p. 756.
2. A. C. Wooler, *Introduction to Prakrit*, reprint, Delhi, 1975, p. 11, no. 6 and p. 13, no. 13.
3. M. Monier-Williams, *op.cit.*, p. 1263.
4. A. H. Dani, *Indian Palaeography*, Oxford, 1963, pls. III a-VIIIa-b.
5. *Ibid.*, pl. V b, row 10 and 11.
6. D. C. Sircar, *Select Inscriptions Bearing on Indian History and Civilization*, vol. I, 2nd edition, Calcutta, 1965, pl. XXXIII, no. 1.
7. *Epigraphia Indica*, vol. VIII, p. 93 and pl. VI, no. 22.
8. D. C. Sircar, *op.cit.*, pp. 189-190.
9. B. N. Mukherjee, *Kharoshtī and Kharoshtī-Brāhmī Inscriptions in West Bengal (India)* (published as the *Indian Museum Bulletin*, vol. XXV), Calcutta, 1990 (cited later as *KKBI*), pp. 65-68.



10. The latest known occurrence of the letter *sa* with its mouth closed is noticeable in the inscription of the year 74 of the Azes Era, i.e. A.D. 16-17 (*Bulletin de l'École Française d'Extrême Orient*, vol. LXVII, 1980, pl. III, 1. 1, 3, etc.)
11. *KKBI*, pp.13-14.
12. *Ibid.*
13. B. N. Mukherjee, "The Impact of Gandhāra on the Art of Ancient Visiga : A case of Eastern Response", *Gandharan Art in the Context-East-West contacts at the Cross-Roads of Asia*, ed. by F. R. Allchin and others, Cambridge, 1997, pp. 173-189.
14. P. Gardner, *The coins of the Greek and Scythic Kings in Bactria and India in the British Museum*, London, 1886, pl. I No. 11, pl. IV, no. 3, pl. XXI, no. 13, B. N. Mukherjee, *Commentary on the Political History of Ancient India* by H.C. Roychaudhuri, 8th Edition, New Delhi, 1996, p. 702.
15. B. N. Mukherjee, *Nanā on Lion-A study in Kushāhṇa Numismatic Art*, Calcutta, 1969, figs. 19, 21 and 23 and pp. 113-114.



# KHAROSHTĪ-BRĀHMĪ INSCRIPTIONS WRITTEN IN THE CALLIGRAPHIC STYLE OF THE ŚĀṆKHA-LIPI

B. N. Mukherjee

There is an interesting seal impression on a roundish piece of terracotta, recently unearthed at Chandraketugarh, in the district of 24 Parganas (North) in West Bengal. It measures 5.3(5) cms (approximately). It is now included in the collection of Dr. G. S. De of Habra, who has kindly permitted me to publish it.

There is a device of a bow fitted with an arrow and with its string stretched backward indicating a position just before releasing the arrow. An inscription in the Mixed script, consisting of Kharoshtī and Brāhmī letters, appear along the greater part of the border of the object. (fig. 1).

The first letter is *ma* of the Brāhmī script. It is to be read from outside. It is placed at 9 o'clock, taking the arrow pointing to 12 o'clock. The second letter is Brāhmī *ga*, which is removed clockwise to about 45° from its usual vertical base. The same may be said about the next letter, which is Brāhmī *ṇa*. Above the present position of this letter there is a dot, indicating *anusvāra*. These are followed by a conjunct character

consisting Brāhmī *tha*, *sa* and *chha*. The medial sign of *ā* is added to *tha*. There is a sign of *visarga* immediately after the conjunct character. The next two characters are Kharoshtī *kha* and *ṭha*, which have been placed in proper positions. The next character is Kharoshtī *pa* with the sign of medial *e*. Here the letter is removed from its base anti-clockwise to about 45°. The last letter is Kharoshtī *sa*, which is placed 45° to the left (from the readers' point of view) of its vertical position.

It is interesting to note that some of the letters are distorted or embellished. Thus the left hand stroke of *ma* is extended beyond its base. The top line of *ṇa* is curved upwards. The lower curve of the open mouth of *sa* is extended to left (from the readers' point of view) and a horizontal stroke added at its bottom.

The inscription can now be read as *Magaṇam Thāschhaḥ Khathape sa* (or *khathapasa*, taking the apparent sign of medial *e*, attached to it as an embellishment). The inscription can be Sanskritised as



*Magāṇām Thāschhasya Kshatrapasya*. It can be translated as "of Kshatrapa Thāschha of the Magas" (or the Maga group or family).

The fully open mouth of *sa* and the triangular base of *ma* may tend to date the seal concerned to c. 1st or 2nd century A.D. It belonged to a certain Thāschha, who was a Kshatrapa. We do not know whether he was an administrative ruler of a part of ancient Vaṅga (which included the Chandraketugarh area during the period concerned) or of an outside territory. In the latter case he left his seal in Vaṅga, or sent it there for some purpose. He might have some contact with that area. The evidence of contacts between the north-western part of the Indian subcontinent and Vaṅga of this age is now well-known.<sup>1</sup>

An inscription on a pot found in the Chandraketugarh area and dated c. late 1st or early 2nd century A.D., refer to a *Maka dvija*<sup>2</sup>, who has been considered to have belonged to the class of Maga Brāhmaṇas.<sup>3</sup> The group of the priestly Magas came to the subcontinent from the zone of Iranian culture and was ultimately accepted as belonging to the Brāhmana caste.<sup>4</sup> If the kshatrapa in question belonged to the same caste, he changed his profession.

The style of writing of the inscription concerned conforms at least to the principal feature of the style of writing the so-called Śaṅkha-lipi or Shell script. In writing this script, which had been basically derived from Brāhmī, the letters were often removed clockwise or anticlockwise from their base. These were also sometimes distorted and/or embellished. Superfluous lines and pat-

terns were connected with the letters.<sup>5</sup> Our inscription possesses these features, excepting the last one. So calligraphically the inscription in Kharoshtī-Brāhmī may be affiliated to the class of Shell epigraphs.

The same style of writing is betrayed by a short inscription stamped on the lower part of a pot found in the Chandraketugarh area and now in the collection of Dr. G. S. De. (fig. 2)

The first letter is Brāhmī *tha* (*tha* + medial *ā*). The next letter is Kharoshtī *ga*, with its base turned anti-clockwise to about 45°. The following letter is Kharoshtī *ḍa*, which is in its proper position. But the last letter, Brāhmī *ma*, is shown upside down. Its base also slightly encroaches on the left-hand vertical of *ḍa*. The Kharoshtī-Brāhmī inscription readable as *Thāgaḍama* (=Tyāgaḍama), seems to refer to a personal name. It could be the name of the potter or of the owner of production unit which had produced the pot. It is written in the calligraphic style of the Shell script.

Another stamped inscription on the pot reads *Ṭhaka*. Both the letters belong to the Brāhmī script. Palaeographically both the stamped inscriptions belong to c. 1st or 2nd century A.D.

An impression on a round terracotta object bears an inscription in three lines within a border of dots. It was unearthed in the Chandraketugarh area. It is now in the collection of the State Museum, Calcutta. Its accession no. 99.58.

The letters are shown in positions often altered from their usual ones. In certain



cases their positions have been even reversed. These peculiarities remind us of a feature of writing the Shell script. (fig. 3)

The fourth letter in the first line, can be recognised as Brāhmī *tha*. The second character in the third line can be taken as Brāhmī *ga* or Kharoshtī *ya* or *sa*, all turned anti-clockwise from their usual base by about 45°. The rest of the characters are in Kharoshtī with their usual positions often altered and at least twice reversed (in cases of *ja* and *tha* in the first line). We can now read the inscription as follows. (fig. 3).

L. 1. *Majaṭhathama*

L. 2. *sa Gamata*

L. 3. *maga* (or *ya* or *sa*) *sa*

The inscription can now be translated as follows.

"Of Maga (or Maya or Masa) from the village of Majathathama."

Palaeographically the inscription can be assigned to c. late 1st or 2nd century A.D. Both the forms of *sa* (the first letter in the second line and the last character in the third line) have the mouth completely open.

Another terracotta seal impression in the collection of the State Museum, Calcutta, has a Kharoshtī-Brāhmī inscription, betraying the above style of writing, as indicated by the Shell script. It is datable to c. 2nd century A.D. Its accession no. is 99.35. It was found in the Chandraketugarh area.

The inscription can be read as follows (fig. 4)

(1.1) *Spagadra-maṭha-jēṭha*

(1.2) *Mehamaja*

(1.3) *Hamasasa.*

The inscription can be translated as follows.

"Of Hamasa, the son of Mehama [and] the chief of the monastery (at or called) Spagad(r)a."

The above noted Kharoshtī-Brāhmī inscriptions are first known writings in the Mixed script, which are written following the calligraphic style of the Shell script. So these are very important to students of Indian palaeography.

## NOTES

1. B. N. Mukherjee, *Kharoshtī and Kharoshtī-Brāhmī Inscriptions in West Bengal (India)* (published as the *Indian Museum Bulletin*, vol. XXV), Calcutta, 1990 (cited below as KKBI), pp. 23f.
2. *Ibid.*, pp. 15, 28 and 44; fig. 4.
3. *Ibid.*, p. 28; Ptolemy, *Geographike Huphegesis*, VII, I, 74; *Epigraphia Indica*, vol. II, pp. 333.
4. KKBI, p. 28.
5. B. N. Mukherjee, *Decipherment of the Shell Script*, Lucknow, 1983, pp. 27f.



## BEAD INDUSTRY OF ANCIENT INDIA — A CASE STUDY AT SOUTH BISHNUPUR

Rita Dutta

The ancient people loved to adorn themselves with jewellery made of beads and consequently left them behind to be re-discovered by the archaeologist. It is a decorative item of different colours made of glass, shell, bone, terracotta and semi-precious stones. Beads are put together by various methods to form different ornaments including necklace, the most popular adornment of women folk in the early days, and one can be sure that the vogue of beads will live as long as woman vanity (Bhusan 1964). Beads were so popular in the ancient days that it formed an important item of external trade between different countries. Even today beads have great demand in modern society. Although beads are often treated as minor antiquities, but in reality it provides a fascinating story of socio-economic condition of society, since bead making industries did not cease to exist in human society. Thus it is a great heritage of the past and will be carried in the future.

### Use—Religious/Secular

Stone beads were used for various purposes such as religious or sacred and secular or beneficial. From the sacred point of view, stones (beads) were used as an object

endowed with magical power against evil effects of various planets (Rahman, 1997). They are not always regarded as simple jewellery or decorative objects, but have great power, charms and talisman (Omenka, 1999:15). It is also considered as having great beneficial qualities like health, fame, wealth, fortune and longevity etc. (Shukla 1968, Rivett Carnac, 1900).

It is widely believed in China and India that some diseases are curable by wearing stones (Rai, 1964), for example asthma is cured by shapphire, while emerald stone cures mental disorder. Besides, stones have great effect on human body and mind. According to Omenka, (1999:29 ff.) "Garnets with their brilliant red colour activates the body vitality. The carnelians, with their softly shimmering orange coloured light, bring us in the flow, flood us with warmth and increase our feeling for life. The dark blue lapis lazuli, often streaked with shimmering gold coloured pyrite, strengthen the souls with great power of faith and give us inner peace. The crystals which brings us to the light of life, cleanse, clarify and organise our subtle energies. The red jasper harmonizes sick and chalcedony strengthens



our verbal expressions."

Omenka, (1999:12), further believes that, "luminous radiant powers of the universe are concealed in stones which activate our powers of self healing in a natural way and help to develop our divine light of consciousness." Thus we find in India that the wearing of stone has a strong ritual significance. It is believed to have certain powers inherent in them and has been considered as auspicious, but sometimes it brings badluck. Offering of stones to deities are considered as a means of bringing rewards. In fact, stones are aggregates of different mineral composition which effect our body accordingly.

From the secular point of view, the stone beads as well as the glass beads were used as an ornament for personal decoration only, while from the beneficial point of view, the study of these beads helps us to understand the belief, the customs, the economic condition, the set up of the society and its contact with the foreign lands, (Rahman 1997). Beaded jewellery was always an important object to all classes of people rich and poor. This is evidently clear from the depiction of beaded ornaments on terracotta figurines, sculptures, icons, reliefs on friezes and the quantity of beads found from the archaeological sites.

#### Literary Evidence

Literary evidences are both supplementary and corroborative. Both glass and semi-precious stone beads have been reported from very early period. For instance, several type of beads have been referred in the "Atharvaveda." "Samhita" and the "Sutra"

literature refers to "Manikara" (Ghosh 1989:217). In "Satapatha Brahmana" dated between 800 B.C. to 500 B.C. there is reference of glass beads<sup>1</sup> (Ghosh 1924). In "Taittiriya Brahmana", there are references of decorated glass beads.<sup>2</sup> The "Ramayana" also refers to "Kachakara" (Mitra, 1875). The Buddhist and Jain literatures refers to various semi-precious stones. "Vinaya-pitaka," refers to "kacha," (Ghosh 1989:217). The popularity of beads are again proved by the "Arthasastra," (the 3rd. cent. B.C. sanskrit treaty on economics and politics), it refers to false gems (Maganlal Buch, 1924). In "Arthasastra", the word "kacha," was used atleast for ten times, at one place it means glass gems<sup>3</sup> (M.G. Dikshit, 1969). "Hitopadesha" (C. 100 B.C. to 500 B.C.) also refers to the glass gems. The Brahmi inscriptions of about 2nd. cent. A.D. found at Archchalur in Erode district mentions about gem stone trader called "manivanakkam", (Rajan, 1997/98: 60). References of precious and semi-precious stones have also been found in "Archaranga sutra", of (C. 200 B.C.) In the "Vishnudhar-mottara puranas" of c. 5th. cent. A.D., in the "Brihatsamhita" of Varaha Mihira of c. A.D. 505 to A.D. 587 and in the "Ratnasashtra" literature of the mediaval period. The "Kathasaritsagara" (XXIV. 178. 179) refers to imitational ornaments made of glass beads. In "Sangam" literature there are references of gems and their qualities (Rajan 1997-1998: 59). "Divyadana", a late Gupta work refers that semi-precious stones were preferred to glass. Beryl, (Vaidurya) of Indian literature is found to have been used very rarely for beads. The "periplus" refers to a large scale



export of carnelian from Baryaza, (Bharuch in Gujrat), (Ghosh, 1989: 220). Pliny, described that Indian glass was beyond compare because it was made in India from fragments of rock crystals. Imitations of various precious stones particularly Beryl were made by the Indian people by colour rock crystals, (Varshney, 1950). All these literary source throw light on the high technological skill of glass and stone beads craftsman but unfortunately they do not throw any light on the process of bead manufacturing in ancient India.

1. Lomani simyamte yat-kachan avayamti, loman-yevasya shambhawanti. Sat. Brah. XIII, 26.8.
2. Yad baleshu kachan avayanti. Taittiriya. Brah, 3,9,4,5.
3. Sesha kacha manaya. Arthasastra, 2-11, 35.

#### Archaeological Evidence

The earliest evidence of beads has been found in association with the Aurignacian culture of Europe. But in case of India, the earliest evidence came from an upper palaeolithic site at Patne in Maharashtra, (Sali. 1985), which has been radio carbon dated to  $25000 \pm 200$  B.P., (ref. in Misra 1995). It appears therefore, from both the evidences in Europe and India that, bead as a form of decorative object appeared in human society during upper palaeolithic culture, but its universal application came into being during neolithic and post-neolithic period. The excavation at Mohenjodaro, Harappa, and Dholavira have yielded a huge amount of beads of differ-

ent shapes and sizes, (Vats, 1940, Marshall, 1931; Mackay, 1937-38; Bist, 1999 n.d.) The discovery of bead making furnace at Lothal, has been a great indication that tradition of bead making industry in India goes back to 2300 B.C. The chalcolithic sites in western India have also yielded a large number of semi-precious stone beads which are broadly contemporary to the Harappan culture, (sankalia 1974; shukla, 1972; Janaki, 1980; Francis, 1982). The tradition continued in the late and post-Harappan times (Rao, 1986).

In the Gangetic valley sites like Ahichchhatra, Sravasti, Kausambi, Atranjikhhera, Rajghat, Kumrahar, Tilarakot, Hastinapur, Vaisali, Pataliputra, Sonkh etc. have yielded various type of stone beads. The chronology of these sites can be fixed between 800 B.C. to A.D. 1500, (Rahman, 1997). It may be pointed out here in this connection that the Harappans had the distinction of etching carnelian beads and agate beads. However, the technique has been lost in the post Harappan period. But according to R.C. Gaur (1983), the technique of etching re-appeared in the the Ganga valley around 600 B.C.

So far as glass beads are concerned, the painted grey ware sites like Ropar, (IAR-1960/61), Hastinapur, (Lal, 1957), Atranjikhhera, (Gaur, 1983), Alamgirpur, (IAR-1958/59), etc. have yielded a large number of glass beads. High frequency of glass beads occurring during this time definitely indicates that the technology of manufacturing glass beads came into being during the painted grey ware culture. Glass



beads have also been reported from N.B.P. levels in this area. Eye glass beads began to appear during this time, while various coloured glass beads have been discovered from Post-Maurya to Pre-Gupta period at Nasik (Sankalia, 1995), Nevasa, (Sankalia, 1960), Karad, Ter, Sopara, (Dikshit, 1952, 1967 and 1969). The arguments of M.G. Dikshit, (1969), that the Guptas did not know the technique of manufacturing glass beads have been rejected by Deo & Dhavalikar, (1968), Singh & Saran, (1983), Deo, (1974), and Narain (1976), and others. In fact, beads were used as a common article during the Gupta period. The discovery of glass bead factory at Cambay is a good indication that the tradition of bead making knowledge in India was handed down to generation after generation. The tradition which was invented in the Harappan never ceased to exist in India. It was the most popular and prosperous trade item in internal and external overseas trade and in commerce.

### Bengal

So far Bengal is concerned, a large number of chalcolithic sites have been excavated, but none of the sites have yielded positive evidence of bead making centre. However, a large number of stone beads have been found from Pandurajardhibi, (S.C. Mukherjee, 1992: 11). Mangalkot, (Ray & Mukherjee, 1992:107), Tamluk, (Mukherjee S.C. 1992), Banewardanga, (Mukherjee S.C. 1992 : 9), Dihar, (Pal A.C. 1992: 101), Chandraketugarh, (Excavation report C.U.), Bangarh, (Goswami K.G. 1948), Pokharna (Excavation report, Calcutta University.)

Harinarayanpur, (IAR-1964/65) Deulpota, (IAR-1963/64) etc. Datta, (1995), on the basis of unfinished beads and raw materials found from Chandraketugarh and Santaldanga has suggested that these two sites may be the possible centres of bead making industry in Bengal.

### South Bishnupur

The site South Bishnupur is not an excavated site. But antiquities comprising terracotta plaques, pottery, stone and glass beads etc. have been found from time to time from the site. Antiquities particularly terracotta plaques of Sunga and Gupta styles may indicate its close association to that period which roughly corresponds to 2nd cent B.C. to A.D. 5th cent. In the present context, an attempt has been made to discuss the semi-precious stone and glass beads found from the site now in the collection of the Indian Museum. (Plates 1,2,3,4).

### Location

South Bishnupur, the archaeological site is situated in the district of South twenty-four parganas, at the extreme south eastern corner of lower Bengal in the state of West-Bengal. South Bishnupur itself a police station lies within the limits of Gangetic delta and therefore, its physical feature is like that of a deltaic land. Many big rivers flow from this vast alluvial plain. The chief of which is Bhagirathi. The site stands on the east bank of the river. The Bhagirathi which is called Hooghly in its lower reaches is itself a branch of Ganga, Fig. No.1.



## Study of Beads

Altogether 320 beads from the site have been selected for the present purpose. They are now housed in the Indian Museum, with accession number 90/360. The interpretation of the raw materials have revealed adequate evidence of different variety of raw material used in beads at the site. The beads have been studied into groups according to the raw materials of which they are made. So far as the raw materials of the stone beads are concerned, they are made up of both transparent and opaque variety of silicate stone. The transparent variety of silicate stones are colourless rock crystal, quartz, etc. While the opaque variety of silicate stones are particularly agate, banded agate, carnelian, chalcedony, jasper, jade, lapis-lazuli, garnet etc. on the other hand, the glass beads regarded as one of the earliest achievements of handicrafts, are of different colours. So far as the structure of the Indian glass is concerned, it consists of soda-lime-silica with a large quantity of free metallic ions introduced by impure raw materials. Relatively, few ions of copper, manganese or nickel in this mixture are sufficient to give required colours. (Singh R.N. 1989).

## Typology

Although Ghosh, (1989:221), has suggested typical shapes of stone and glass beads for specific time period, but how far this assumption is supplemented by excavated data is doubtful. For example, Ghosh has suggested that long cylinder is a typical Harappan shape, short barrel circular beads are between the Maurya and the

Gupta periods, barrel tubular belong to the early historical period, barrel hexagonal between Maurya and Gupta period, flattened barrel hexagonal to Maurya Satavahana period, barrel triangular to Maurya, collared barrel occurred after the Gupta period, cylinders with square section occurs mostly between 2nd. cent. B.C. to A.D. 2nd. cent. Bicone pentagonal beads are restricted between 100 B.C. to A.D. 100 (Ghosh, 1989:221). In the present context the author first attempts to classify the shapes of the beads according to the raw materials on which it is made and then an overall review would reflect the nature and type of the bead industry of South Bishnupur. Fig. No. 2.

## Stone Beads

**Black Agate.** altogether 35 beads.

Spherical = 9

Spheroidal = 8

Irregular = 4

Oblate = 2

Annular = 2

Cylinder disc = 2

Convex square with lenticular cross section = 2

Rectangular truncated cone = 1

Ellipsoid = 1

Cornerless cube = 1

Faceted pentagonal bicone = 1

Faceted hexagonal truncated bicone = 1

Convex tabular with lenticular cross section = 1

**Banded Agate.** (White on black), altogether 37 beads.



Cylinder disc = 13

Spherical = 10

Spheroidal = 5 (One broken).

Stratified bicone = 3 (two are broken).

Tubular = 2

Ellipsoid = 1 (broken).

Bicone = 1

Octagonal truncated stratified bicone = 1

Rounded convex romboid with lenticular cross section = 1

**Banded Agate.** (black on white), altogether 37 beads.

Cylinder disc = 31

Spherical = 2

Barrel = 1

Lenticular = 1

Ellipsoid = 1

Tubular disc = 1

**Etched Agate.** (White on black), only 1 bead.

Spherical = 1 (broken).

From the above analysis it appears that in Bengal, banded agate is preferred than other beads, they are much more common. The present collection consists of one hundred and ten agate beads among which thirty seven are banded agate with white on black variety, thirty seven are black on white variety, thirty five are black agate and only one is etched agate. Black agate is a variety of chalcedony (silicon dioxide), (Jaggi 1969:104). Sometimes chlorite was also used instead of agate for making similar shapes. The banded agate beads are carved by irregular concentric bands or lay-

ers separated by gradations of white to grey or brown. The beads are prepared in such a manner so that the band on them produce various designs such as chevrons, eye, zone etc. The etched agate bead indicates a much more developed technique, (Beck, 1949). The characterised of the etched agate bead from this site is the geometric designs made by rows of pentagons connected in the marginal bands. The bead is partly broken. The most popular shape of the banded agate beads are cylinder disc, spherical, spheroidal and stratified bicone. One banded agate pendant bead deserves mention here due to its shape but unfortunately the bead is broken, it is rounded convex romboid with lenticular cross section.

**Carnelian.** altogether 33 beads.

Spherical = 24

Ellipsoid = 4

Round tabular = 1

Lenticular = 1

Cylinder disc = 1

Faceted pentagonal bicone = 1

Rounded convex romboid with lenticular cross section = 1

**Etched Carnelian.** (white on red) only 1 bead.

Long barrel = 1

There are altogether thirty three carnelian beads, along with one etched carnelian bead. The stone is of a translucent form of chalcedony (silicon dioxide). It's colour ranges from brown, salmon pink, orange to a barely red transparency. This type of carnelian bead is rare in the site. In this bead ten circular or concentric white



etchings are drawn on red surface. The most popular shape is spherical along with ellipsoid cylinder disc etc.

**GARNET.** altogether 31 beads.

Ellipsoid = 10

Spheroidal = 8

Spherical = 3

Oblate = 2

Convex square with lenticular cross section = 2

Convex rectangular with lenticular cross section = 2

Irregular shaped = 1

Pear shaped = 1

Lenticular = 1

Round tabular = 1

The analysis have revealed thirty on garnet beads, which bear a glassy sheen and a high lusture with a great hardness. It is a translucent red iron or magnesium aluminium silicate, with a pleasing deep red colour and sometimes with a violet or brown tint. The following main shapes deserves mention here viz. spherical, spheroidal, and ellipsoid.

**Crystal.** altogether 19 beads.

Faceted hexagonal truncated bicone = 5

Hexagonal truncated bicone = 2

Spherical = 2

Ellipsoid = 2

Hexagonal = 1

Triangular = 1

Round tabular = 1

Rectangular = 1

Cornerless cube = 1

Convex square with lenticular cross section = 1

Faceted convex square = 1

Faceted convex rectangular = 1

Crystal is a hard glass like transparent colourless quartz (silicon dioxide). Altogether 19 crystal beads have been found. Due to the transparency of the stone the line of perforation is clearly visible. The significant shapes are faceted hexagonal truncated bicone, hexagonal truncated bicone, convex square with lenticular cross section, spherical, ellipsoid, faceted convex rectangular, one cornerless cube bead deserves mention here because the line of perforation in the bead is straight and from one side, while in other beads the perforation are seen made from both the ends.

**Jasper.** Altogether 18 beads.

Barrel black = 3

Barrel red = 2

Barrel white = 1

Spherical white = 1

Spheroidal white = 1

Cylinder white = 1

Disc white = 1

Tubular white = 1

Annular white = 1

Pentagonal black = 1

Short cylinder = 1

Hexagonal truncated bicone = 1

Collared green = 1

Cylinder disc green = 1

Rounded convex romboid = 1



Jasper is a hard compact, opaque and cryptocrystalline variety of quartz (silicon dioxide). Only eighteen jasper beads have been found, with a great variety of tints such as mottled red, black, brown, green, white etc. So far as the shapes concerned, they are spherical, short cylinder, hexagonal truncated bicone (broken). Pentagonal barrel. The green collared bead deserves mention here.

**Chalcedony.** altogether 12 beads.

Spherical = 5

Spheroidal = 3

Pentagonal = 1

Barrel = 1

Ellipsoid = 1

Hexagonal truncated bicone = 1

Chalcedony is a translucent white, rather waxy looking quartz (silicon-dioxide) (Jaggi, 1969). The beads are of different shapes, spherical, spheroidal, ellipsoid, barrel, pentagonal, hexagonal, and truncated bicone.

**Lapis-Lazuli.** altogether 2 beads.

Triangular bicone = 1

Barrel = 1

Lapis is a dark blue mineral, lazurite, a sulphur containing (sodium aluminium silicate). Two specimens of lapis-lazuli have been reported, they are streaked with white impurities, one is bicone triangular and the other is barrel shaped.

**Glass Beads.**

It is worthy to note that, the site yields glass beads also, the number of glass beads indicate that the bead makers were quite

familiar with the natural gem stone and were perhaps imitating them with glass beads, they were of diverse colours and forms, so they deserves special mention here. The interpretation of the glass beads reveal the following types, trade wind bead, eye bead, blue green glass bead, beryl crystal, mosaic eye bead. Among the glass beads different colours like deep blue, light blue, red, yellow and white deserves mention here.

**Trade Wind Bead.** altogether 58 beads.

Cylinder disc orange = 35

Cylinder yellow = 7

Annular orange = 7

Cylinder disc blue = 5

Barrel disc yellow = 2

Barrel disc orange = 1

Convex cone disc orange = 1

Trade wind bead often named as the drawn glass bead, or Indo-Pacific bead or millefiori bead, they are usually made in orange, yellow, green and perhaps in other colours also. They are monochrome and drawn (cut from a tube), altogether fifty beads have been studied. This is the largest variety among the collection. They look like small tubes, made about a centimetre in length. According to Peter-Francis, these beads are dated from 3rd/2nd. cent. B.C. to 1200 A.D. (Francis jr. 1996:140).

**Glass Eye Bead.** altogether 7 beads.

Spherical white on black = 4

Spherical white on blackish brown = 1

Oblate black on white = 1

Oblate brownish on white = 1



Altogether seven agate eye beads have been reported from the collection. These beads are spherical and oblate in shape, having white spots on black background, or black spots on white background.

**Blue/Green Glass.** altogether 6 beads.

Barrel = 2

Cylinder disc = 2

Faceted square cylinder = 1

Faceted hexagonal truncated bicone = 1

In South-Bengal, blue green glass beads are not significant. There are altogether six blue green glass beads. The shapes so far reported are barrel, faceted square cylinder, hexagonal truncated bicone etc.

**Mosaic Glass.** only one bead.

Square cylinder = 1

It is interesting to note that, only one mosaic eye bead have been reported. It is a product made by multi-coloured fancy glass units. The bead is square cylinder in shape. The bead is hatched with white black, red and yellow colour on the opaque blue-green background.

**Beryl Crystal.** altogether 2 beads.

Truncated pyramid cone = 1

Long convex cone pendant with tapering end and perforation at the broader side. = 1

Beryl is found to have been very rarely used for beads. (Glover 1996:82) They are made up of transparent or yellowish green (alluminium berrylum silicate), with a glassy sheen. They are similar to natural emerald. Only two beads of imitation variety of beryl have been found from South-Bishnupur. One is a long bead with

rounded tapering end, this type is very rare. The bead was most probably used for central pendant. It is one of the largest bead in the total collection, with oval cross section and appears to have been drilled for suspension at its broader end. The other is a smaller bead, it is made in the form of a truncated pyramid or prism or cone.

**Deep Blue Glass.** altogether 11 beads.

Ellipsoid = 1

Cylinder disc = 3

Annular = 1

Square cylinder folded = 1

Multifaceted long convex cone = 1

Segmented = 1 (broken)

Spheroidal = 1

Drop pendant bead = 1

Multifaceted drop pendant bead = 1

**Sky Blue Glass.** altogether 3 beads.

Ellipsoid = 3

**Red Glass.** altogether 3 beads.

Drop pendant = 1

Spherical = 1

Ellipsoid = 1

**Yellow Glass.** only 1 bead.

Lenticular = 1

**White Glass.** altogether 2 beads.

Fluted barrel White = 1

Spheroidal white = 1

Among the glass beads, noteworthy are different colours, and shapes, they are segmented blue glass bead (broken), fluted barrel white glass bead, spheroidal white glass bead, red drop pendant bead, square cylinder folded blue glass bead, ellipsoid



shaped skyblue glass bead, dark blue glass beads of different shapes viz. ellipsoid, disc, annular, multifaceted long convex cone, yellow lenticular glass bead and the multifaceted drop pendant deep blue bead.

### Analysis.

The distribution of raw materials used in the manufacture of beads at South Bishnupur has been shown in fig. No. 3. The figure shows that agate and glass beads are major form of material which amounts to 35% in respect of agate and 29% in use of glass in the total collection. Besides, carnelian and garnet are also important raw materials used by the people. These two specific materials account to 12% and 10% respectively while other stones are crystal, jasper, chalcedony lapis-lazuli etc. But their individual percentage in the total collection are marginal.

The distribution of major shapes of stone beads is shown in fig. No. 4. The figure shows that among the various shapes found in the collection spherical and cylinder disc are two major important shapes of which spherical shapes comprises 25% while cylinder disc constitutes 22% which together accounts to 47% in the total collection. This is closely followed by spheroidal and ellipsoid shapes, which constitute 11% and 9% respectively. The percentages of other shapes are very marginal and possibly it did not have much impact in the industry in as a whole.

Similarly the major shapes of glass beads are shown in fig. No. 5. The figure shows that among the various shapes found as glass beads at South Bishnupur, the ma-

jor and dominant shape was cylinder disc shape which accounts to 58% while other shapes are marginal. Finally, the common shapes of both stone and glass is shown in fig. No. 6. The figure reveals that cylinder disc and spherical shapes are most common shapes found on both stone and glass beads. Their respective analysis are 33% and 19% respectively and this together constitute nearly 52% in the total industry. These shapes are closely followed by spheroidal and ellipsoid type which comprises nearly 17% in the total collection while other shapes like barrel disc and annular type are also common, but not so much important since they are mainly important in glass bead category. So finally we can conclude that both agate and glass comprising 64% in the total collection form the raw materials in our collection. In respect of shapes of stone beads, spherical and cylinder disc comprising 47% are major shapes while in case of glass beads, cylinder disc constituting 58% seems to be the major shape and finally taking into account the shapes of both the categories, it appears that cylinder disc and spherical comprising 52% in the total collection seem to be major shapes of the industry.

### Technique : Stone Bead

Stone beads occupy an important place due to material value of stone and its aesthetic appeal. Manufacturing of stone beads is a complex process involving strenuous job and special skill, (Sikankas 1962, Desautals, 1971, Francis, 1991, Keynoyer, 1991, Niharika, 1993, Allchin, 1915, Rajan, 1997). The technique by which the craftsman used



to prepare these minute beads were much painstaking and their creation was no mean work (Rai 1979). It is obviously a different science which was confined to a class of special workers as it is today and was respected accordingly (Shukla, 1968). They had the knowledge of advanced technique for preparing minute stone beads as small as mustard seeds out of hard minerals (Rajan 1997-98:59).

This prosperous art which is noteworthy for its artistic excellence requires step by step methods. Altogether seven different stages can be identified for the manufacturing of beads. It all starts with the initial selection of raw materials followed by chipping, heating, flaking, sawing, cutting, drilling, and finally polishing. The combined effect of all these are very rich and beautiful. Initial stones selected for the preparation of bead are colourful, attractive and semiprecious. They are agate, banded agate, carnelian, crystal, jasper, garnet, jade, lapis-lazuli, chalcedony etc. The stones which are much more attractive with pleasing colour having bands, speckles etc. and without any flaw are directly taken for manufacturing beads, while the stones which are not much attractive are treated later to enhance colour. The second step is to separate the stone from the impurities adhering to it by chipping or striking, (Rajan, K. 1997-98:60). The third stage is heating, by which some stones like agate, carnelian, jasper, and chert change their natural colour and becomes soft. The carnelians are often salmon pink and the agates are primarily greyish black in colour. They are first roasted then boiled to strengthen their colour through oxidation

(Possehl 1981, Francis 1982 b:2). During the process oxides penetrate through the microscopic fibrous structure of the chalcedony group of quartz minerals. It should be noted that probably due to heating process the colour is not uniform throughout, as the rock itself underwent certain amount of chemical change. The process of preparing coloured stone beads require a developed technique. How they did this is not known, but recently all these have been experimented in laboratory and the desired colour have been obtained, (Jaggi, 1969:104). It may be assumed that a big stone is coloured first then flakings from that coloured stone are taken out for manufacturing bead, which is considered as the fourth stage. After taking out the flakes from the semi-precious stones, they are cut into desired sizes and shapes by the artists or bead makers, having sufficient advanced knowledge in technology and high degree of manipulative skill. Perforation or drilling with cylindrical holes in beads is the most delicate of the entire process. Cylindrical holes are made on beads for suspension. The process depends mostly on the size, and the material of the beads. Different scholars are of the different opinion about the various drilling process. Recently, Gwinnet and Gorelik, (1986), observed that the striations inside the bead holes demonstrate the use of diamond tipped drill bits. This has been observed in the ancient beads from Mantai in srilanka and Arikamedu in South-India, and also in the beads made by the modern Cambay craftsman. Jaggi, (1969:105) is of the opinion that, perforations are made by a hollow ended drill. The beadmakers of the early days may use such



a drill fixed in a bow. In a long bead the drill was perfectly placed on a straight line and an optimum pressure is applied to make a nice perforation. In some cases perforations are made from both the sides so that the holes meet at the middle. According to Rahman, (1997), a metal or a stone drill was used for this purpose. This was done by the help of water and abrasive powder. A small pimple is first made at the point of the hole, so that the drill should not move from the point. The most noteworthy point in this technique is that the drilling is done from both ends and the lapidary should have to be careful, so that the two holes meet at one point only. Perforations made from both the ends are easily visible in the chalcedony or crystal beads because they are transparent. The transparency sometimes indicate their drilling technique, which shows that the perforated lines inside the bead are not always straight. In some cases the holes meet at such an angle that it is impossible to thread the bead. In some cases more than one attempt has been made before the holes meets. In some cases some depressions are seen near the drilling base. According to Mahanty (1997), all these characteristics of perforation indicate unskilled drilling technique. But to me it appears that, crystal is the hardest of all the semi-precious stones, so they are bored from both sides to make a single hole. On the other hand, drilling or hole or perforation is the most delicate of the entire process. Because due to carelessness there is much probability of loss or wasting pure and extensively pure processed material. Probably for this reason a large number of partially

perforated beads are found along with fully prepared beads. It is to be noted that, these partially prepared beads or discarded beads are more or less polished. This indicates that polishing preceded drilling. In the present collection there are some beads without perforation, but bears smooth polish and beautiful shape, it indicates that the beads were shaped before being bored. Williams (1984) observed regular concentric grooves in the agate and carnelian beads from Don Ta Phet, Thailand. Polishing is the last step, so it is regarded as one of the important work. According to Rahman (1997), it is not clear whether polishing was done before or after drilling in ancient times. Presumable a lathehone was used for this purpose. In modern times leather bag is used. The bag is filled up with emery powder and then the beads are rubbed over it to get the desired polishing.

#### Technique : Glass Bead

The most popular method of glass bead making is drawing canes from the moulten glass, some other technique were also employed, they were cane or tubing, folding, twisted wire, wounding etc. All these technological developments demonstrate that the ancient Indian glass bead makers have achieved reasonable success. Colouring of glass required advanced knowledge of colour chemistry, the dynamics of furnace temperature and oxidation, reduction, properties of a substance. Generally, the coloured glass beads were the imitations of precious and semi-precious stones like turquoise, lapis lazuli, red jasper, carnelian, coral etc. (Lucas and Haris 1962). It is clear that, in



ancient India both colourless and coloured, transparent and opaque glass beads were manufactured. (Singh R.N.1989:154).

#### Sources of Raw Material : Stone

So far as the Indian subcontinent is concerned, the sources of raw materials for bead industry have been described by different scholars like Piggott (1950). It is quite possible that the author of the Indus culture and those of central Indian Chalcolithic culture and a host of successive cultures in different parts of this subcontinent might have obtained their raw materials either directly or through intermediaries (Niharika 1993).

Ancient Afghanistan was a major supplier of both raw materials and beautifully made stone beads, due to the mineral wealth of its mountains. Ancient trade routes between Iran, India, China and Russia passed through Afghanistan, making it an important centre of transcontinental trade and commerce intermediary between East and West (Bacon, 1963:251-278). So far as Bengal is concerned, the raw materials came either from Rajmohal hills or Chotonagpur plateau by means of trade (Ghosh, Mazumder 1991).

#### Sources of Raw Materials : Glass

So far as the raw materials of the glass beads are concerned, they are silica (sand), common soda or potash and limestone. Sources of silica may be derived from a wide variety of sources, for example, flint usually calcined and ground to a powder or a quartz sand (silver sand or lynn sand). they contain appreciable amount of iron

oxide (Singh 1989:149). According to Brill (1979), pebbles collected from river bed were the source of silica. Chemical analysis of ancient Indian glasses revealed that, soda was the main alkali used for glass manufacturing, though potash is always present in varying amount (Singh 1989:149). Bhardwaj (1979) is of the opinion that since India is very poor in the natural soda content, "sajji mati", an oxide form of Natron seems to be principal source of soda. Caley (1960) suggests, potash was also a main alkali at some places. Potassium oxide was normally introduced as potassium carbonate, (pearl ash) or as the nitrate. Potassium carbonate is one of the important constituents of wood or vegetable ash (Singh 1989:151), Olin and Sayre, (1974) have suggested that, potash was derive from wood ash. Source of calcium-oxide is lime or limestone. Brill, (1970), suggests that the commonest sources of calcium oxide are calcium carbonate, chalk, limestone, marble or dolomite-calcium, magnesium carbonate, etc. Hodges, (1971) has suggested that the other sources are hydrated calcium sulphate (gypsum), Calcium flouride, (flouspar) and bone ash which contain both calcium phosphate and calcium carbonate (singh 1989:153).

#### Trade

Different scholars like Ray (1356, B.S.), Mazumder (1927), Sarkar (1937), Chowdhury (1959), Coedes (1968), Chowdhury (1996), Bhattacharyya (1977), Datta, (1998), mentioned that since early historic period, Bengal had trade relation and communication not only with other parts of the Indian subcontinent but also outside the



subcontinent by both overland and oversea routes. It may be pointed out here that the recent discovery of etched agate and the carnelian beads in different parts of South-East Asian countries suggests that these stone beads were transported to these countries from ancient Bengal (Datta, 1999).

### Foreign Contacts

The raw materials of carnelian were imported from India to Thailand (Glover 1996), and also China (Dubin 1987:194). Jadeite was perhaps brought to India from North Burma or China (Piggott 1950:184). Lapis-lazuli are certainly of Persian or Afghan origin. Most probably from Badakshan, a place famous for its precious stones throughout the centuries. Export of etched beads have been proved by the discovery of etched carnelian beads of Harappan origin from Iraq, (Dubin 1987:44), Persian Gulf Iran and Central Asia, (Lal B.B. 1998; Piggott 1950:189), in the third and second millennium B.C. and has an interesting bearing on the trade relation and the date of the Harappan civilization (Piggott 1950:189). In the late 4th. Cent. B.C. Indo-Hellenistic style developed. The Greeks provided the Indian craftsman with new motifs and also introduced the technique of granulation into Indian bead making. Another technique, the faceting of beads was also developed, a practice seen only rarely in the earlier Indus valley and Sumerian civilizations (Dubin 1987:194). By the beginning of the Christian era, India was once again involved in long distance bead trade with the Romans and the Persians. Roman mariners had direct access to the rich gem fields of Southern India and Srilanka (Ogden 1982:90).

Harappa had contact with Sumer is proved by the faience bead and segmented bead found from both the sites. The etched carnelian beads at Hissar III, and Shah Tepe could again be Indian, rather than Sumerian in origin, though the evidence is not conclusive. The spectographic analysis shows identity of composition between an unstratified faience bead from Harappa and another from Crete of C. 1600 B.C. (Piggott 1950:209). Glass beads became a common feature at the archaeological sites of India. The trade wind beads (Sleen, 1963) or the mutisalah (Lamb 1966), have been reported in a large number. A study of such beads indicates that this type of beads have wide distribution throughout South-East-Asia and Africa. The opaque red glass beads are more common among these bead types. Such beads were also reported from the South Indian megaliths. Lamb, (1966) has found raw materials for making such type of beads at Arikamedu. Eye beads have been appeared in India probably through cultural contacts. (Singh, 1989:125, 126).

### Conclusion

The study of beads whether stone or glass or other objects can provide diverse nature of information pertaining to the socio-economic, religious conditions of human society. The present study reveals that the art of making beads reached a high degree of perfection in ancient India. The technological skill was so advanced and innovative in ancient India that the bead makers could produce minute stone beads as small as mustard seeds. The strings of beads were most popular and favourite personal ornament. Beads were put together to form,



either necklaces, bracelets and girdles. This is regarded as the most stunningly alternative item of jewellery through the centuries not only in India, but also throughout the world. Those specialised craft occupies an important place in the history of human art and it had great demand in human societies. It helps to understand the political, religious beliefs customs, economic condition and so on and so forth of a country. Beads are used for different purposes— as an object endowed with magical power, as status symbols, religious artefacts and standard medium of barter. The tradition of bead making is authenticated by archaeological evidences as this is the most common item unearthed from ancient sites. It symbolises power, prestige protection and beauty. (Dubin, 1987), has put this in right way, "thus beauty is imported to the bead both by use and effects of time." The study of stone beads can help us to identify that a large number of ancient sites were interconnected with each other in the past. Profuse stone beads from a particular site indicate the popularity of beads in that area during early past. The study of ancient beads in India reveals that the technology of manufacturing beads goes back to the time of Indus-valley civilization and the tradition did not cease to exist even during the intervening period i.e; between the fall of Harappan civilization and the rise of early historical period in India. Beaded jewellery has always been an important thing to all classes of people, rich or poor. The sacred and secular purposes of stone beads is proved by the terracotta figurines decorated with beaded jewellery, reliefs on friezes and

literary sources. In respect of glass beads, Arikamedu was the manufacturing centre in ancient time when even glass beads were exported to South-East Asia and other parts of Indian subcontinent.

The bead assemblage of South-Bishnupur belongs to the early historic period with a strong Sunga-Kushan influence. This is suggested by the presence of circular cylinder disc and double hexagon beads which has been assigned by K.G. Goswami (1948) to the Sunga period at Bangarh and the drawn glass beads of Arikamedu and South-East Asia, (Sharmi 1995-96). Agate of different variety was favoured by the people of South-Bishnupur is proved by the availability of agate beads. Probably it was acquired from chotonagpur plateau (Sharmi 1996) and carnelian from western-India. Another striking feature is that the banded agate forms the large proportion of the total assemblage. The drawn glass beads indicate the connection between the east coast of India with South East Asia. Garnet possesses the characteristic of gem stone. Carnelian being a bright coloured stone was much more attractive and had a great demand than the other varieties. Only one lapis-lazuli bead from the site indicates the scarcity of the stone which is probably an important material. All these technological developments amply to demonstrate that ancient Indian bead makers had excelled themselves gradually and achieved reasonable success. Till now archaeological exploration and excavations are going on continuously and no wonder that the voids in the study of beads from Bishnupur would be filled.



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# ARCHAEOLOGICAL SITES OF SOUTH TWENTY FOUR PARGANAS DISTRICT

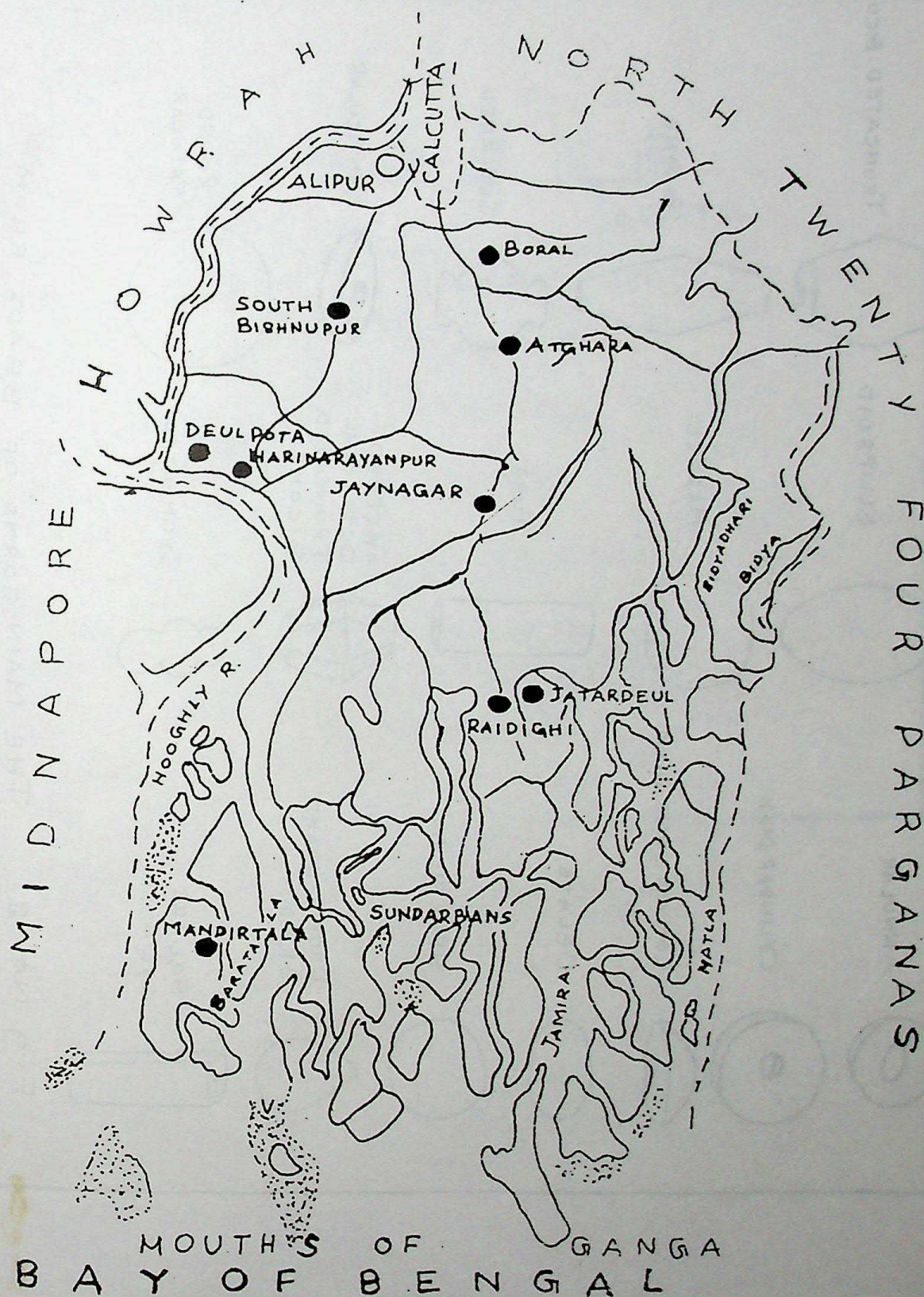


Fig. No. 1



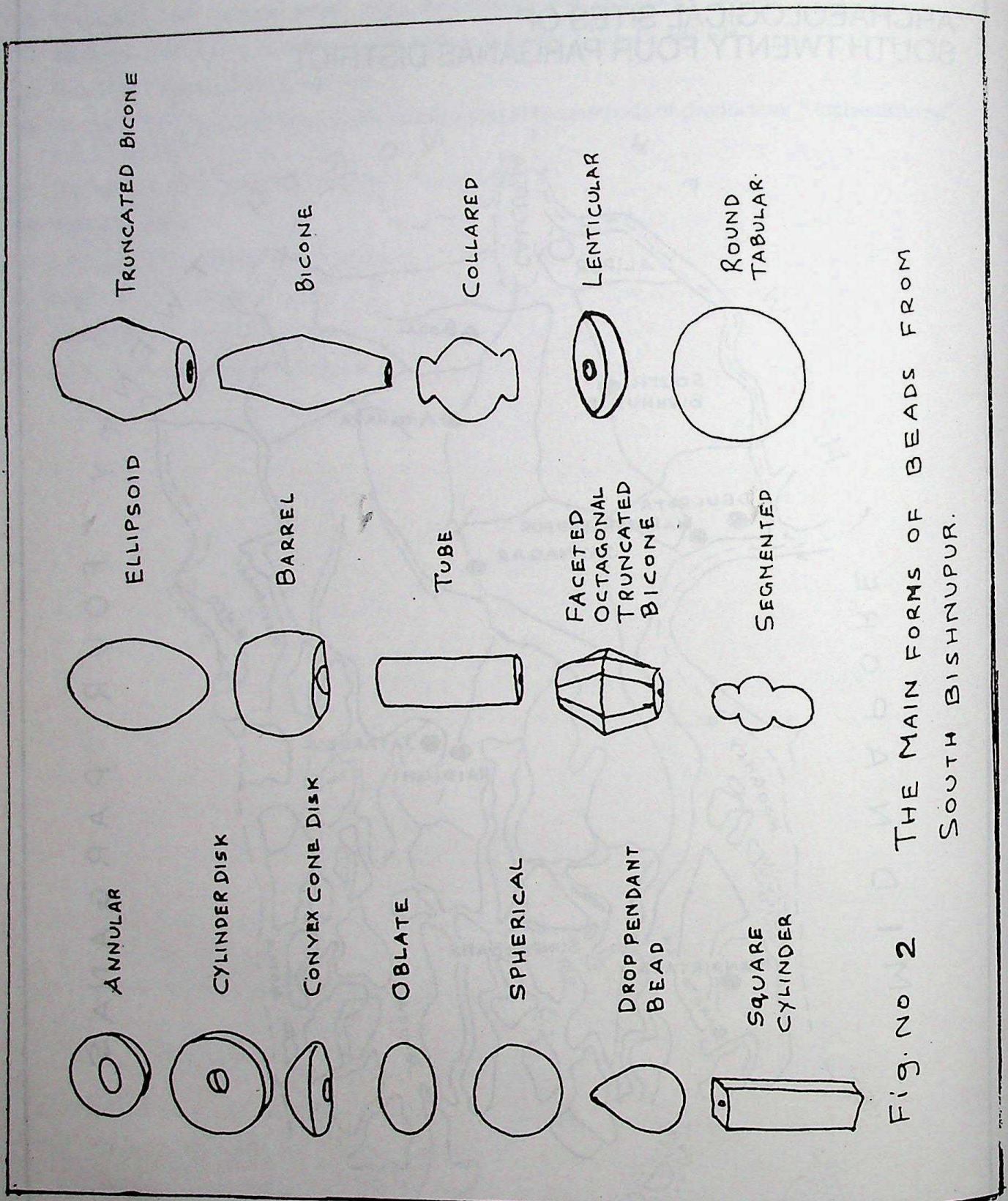
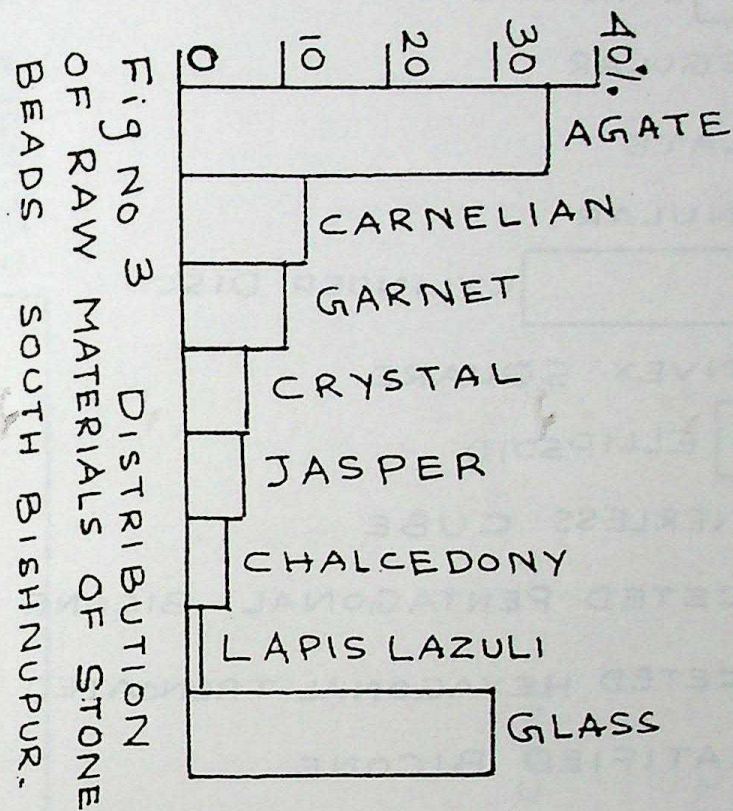
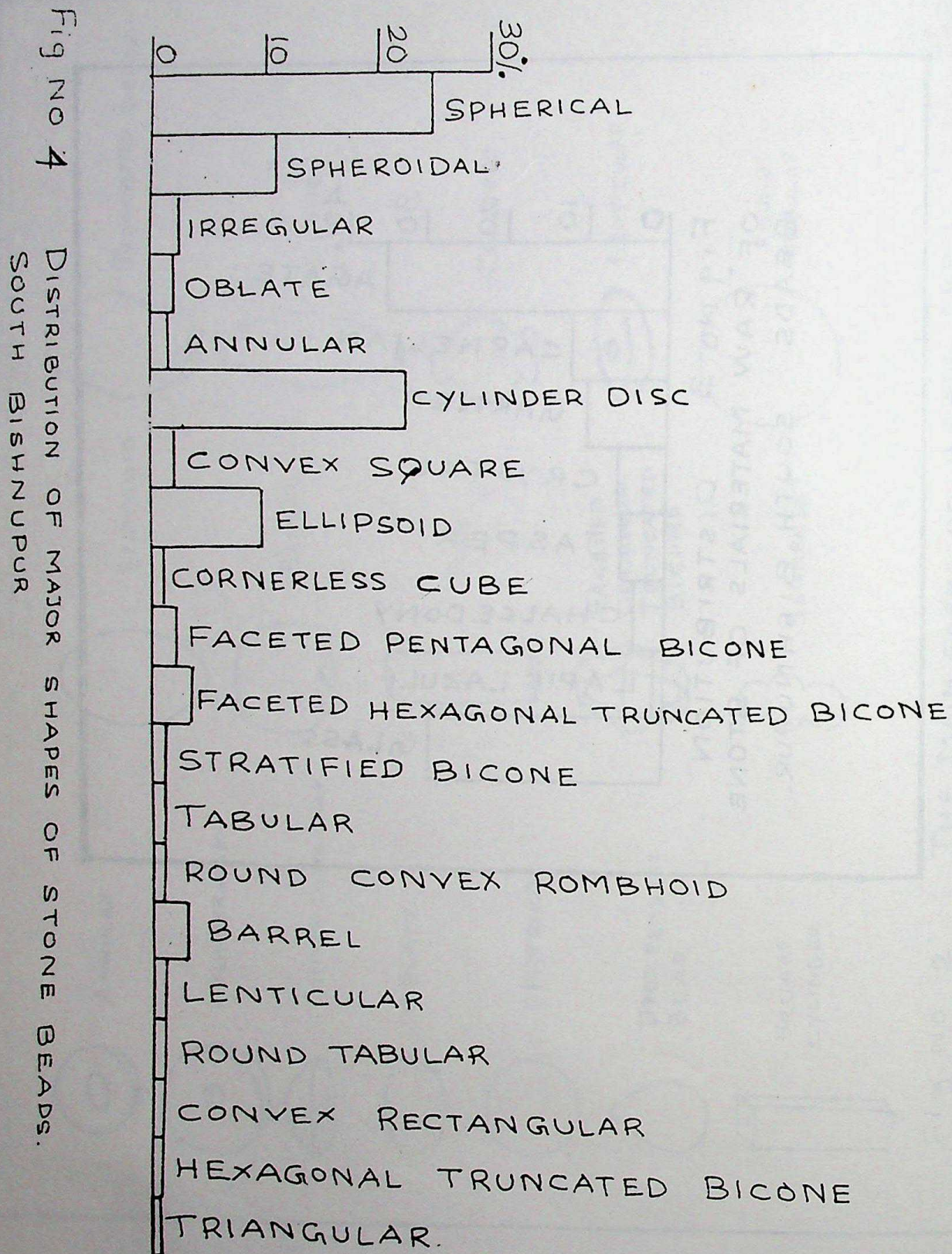


Fig. No 2 THE MAIN FORMS OF BEADS FROM SOUTH BISHNUPUR.











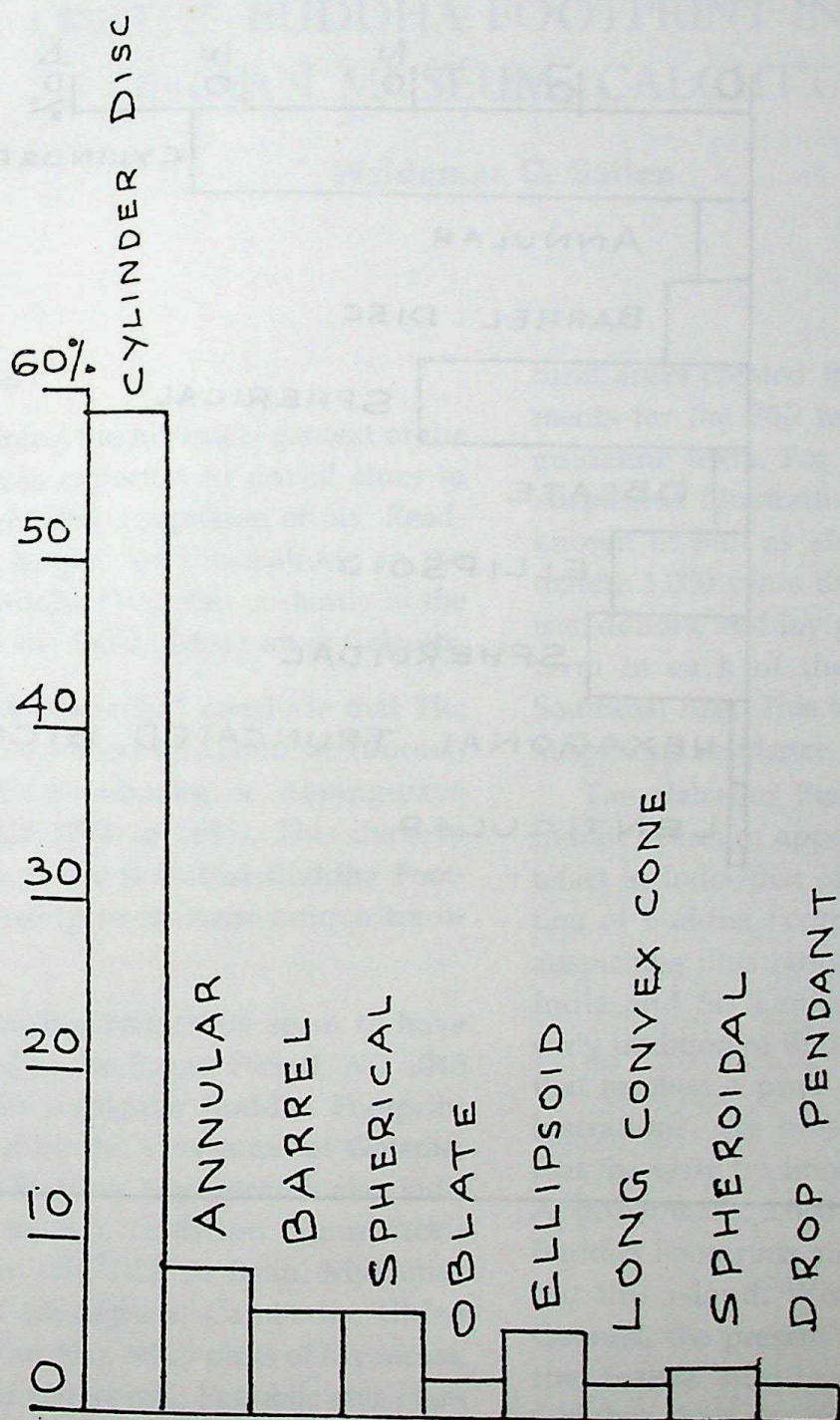
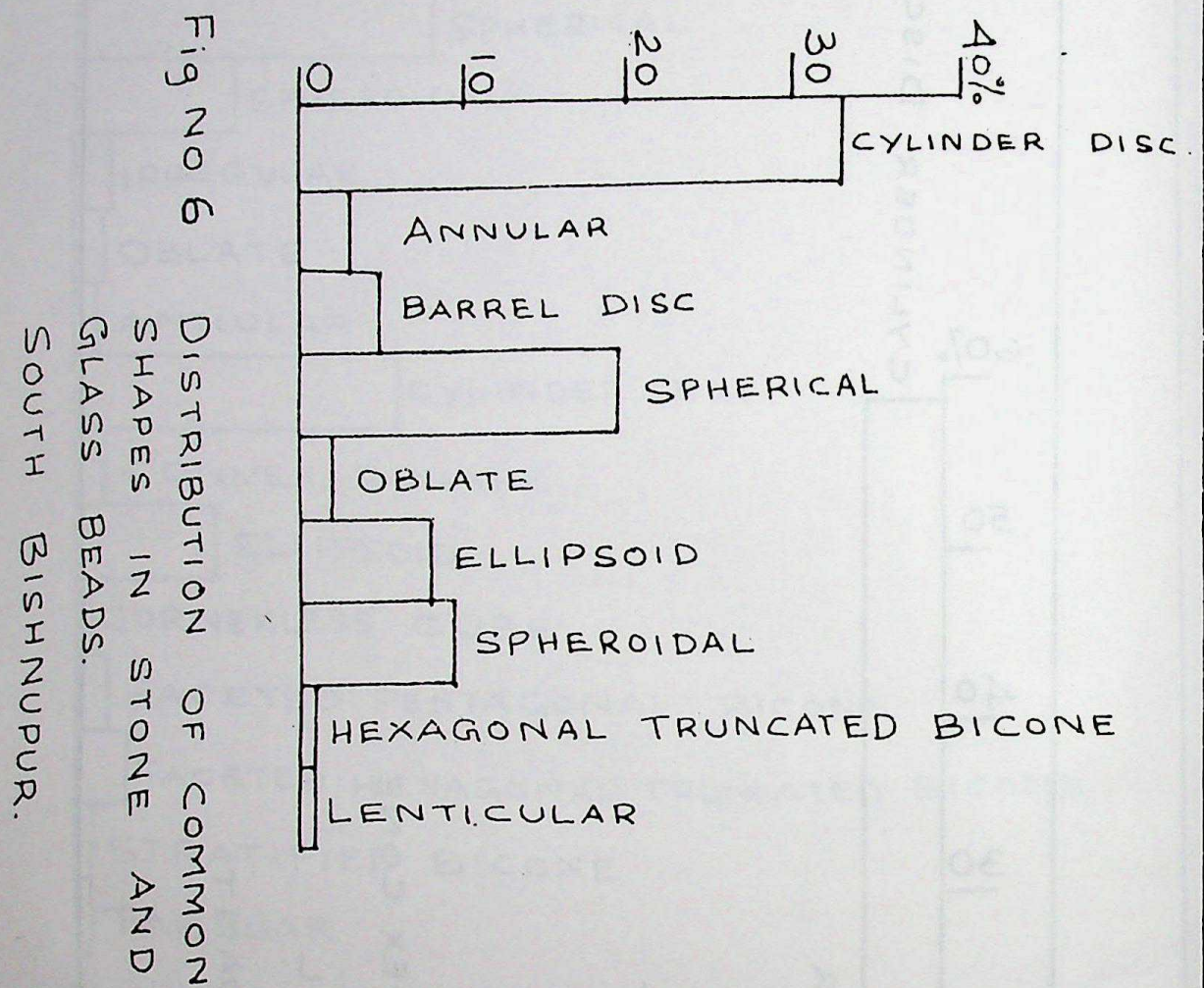


Fig. No. 5. DISTRIBUTION OF  
MAJOR SHAPES OF GLASS BEADS  
SOUTH BISHNUPUR.







# A READING OF THE 108 AUSPICIOUS ILLUSTRATIONS ON THE BUDDHA FOOTPRINT IN THE INDIAN MUSEUM, CALCUTTA

Waldemar C. Sailer

## Introduction

Determining the historical context of the Footprint was expected to unveil clues to the fulfilment and completion of my 'Reading' of the auspicious illustrations on the alabaster Buddha Footprint currently in the collection at the Indian Museum in Calcutta.

From my research, I conclude that The Footprint, originated in Myanmar (Burma) and is of the Kon-baung or Alaung-paya Dynasty (AD 1752 to 1885). This dynasty created Theravāda Buddhist Buddha Footprints according to its own unique traditions.

Such Buddha Footprints seem to have been created in the Bagan Period, AD 1040 to 1287. This particular Buddha Footprint was inspired by the veneration of Gotama, the present Buddha. My research also indicates that such a tradition commenced shortly after AD 1157 in Baan, Myanmar and spread throughout Cambodia, China (Sip-song, Pan-Na), other parts of Myanmar, Lao People's Democratic Republic and Thailand. Throughout history each of these cul-

tural areas created their own visual statements for the Pāli terms contained within guideline texts. For example, the second auspicious illustration on the Footprint is known in Pāli as *sirivaccha*. For approximately 1,000 years the monks, carvers, artists, donors, and lay persons visualised this term in each of the historic periods in Southeast Asia. This term was defined as an auspicious residence.

The alabaster Buddha Footprint at the Indian Museum appears to be the only artefact in India that originates from a tradition of Buddha Footprints that contain 108 auspicious illustrations. Historically, South India and Sri Lanka were centres of the early tradition of Buddha Footprints in Asia that reached a peak of eight auspicious illustrations. My present understanding is that the early tradition started in Sri Lanka. Approximately, 2,000 to 3,000 pairs of stone Buddha Footprints are in existence throughout this island. Whether they belong to Gotama, the present Buddha, or Metteyya, the future Buddha, is not known: or whether they are considered as syncretic creations.



By the end of 1998, I became aware of Gotama the present Buddha Footprints, Metteyya the future Buddha Footprints and a third group that I refer to as the syncretic group. This latter group is based on a third text comprising lists recorded in the two earlier texts. The Buddha Footprints with 108 auspicious illustrations are found throughout Southeast Asia. To date, I have not located a Buddha Footprint with 108 auspicious illustrations created in the period AD 250 and AD 1000. However, textual support has existed since the fifth century AD for the Matteyya Buddha Footprint with 108 auspicious illustrations.

The Buddha Footprint in the Indian Museum possesses the characteristics of a Gotama, the present Buddha, Buddha Footprint, although two major variations have been noted.

### A Reading

As most readers are aware 'Reading' of a Buddha Footprint is significantly different from 'reading' a text. The expression 'Reading' assumes a different mantle when the determination is to concurrently conceptualise and understand the significance, meaning and intention of, including auspicious illustrations on a Buddha, or other Footprint. I have always endeavoured to read Buddha Footprints that will permit their understanding by all peoples, regardless of their religion or culture.

My 'Reading' of the Buddha Footprint at the Indian Museum followed a particular procedure. In the first instance colour photographs were taken of each of the 108 auspicious illustrations, characteristics or sym-

bols. The latter term however does not conform to Pāli norms and understandings.

Subsequently a student from Bagan, Myanmar prepared an interpretative drawing of each illustration by copying the colour print through architectural paper. The first drawing was made in pencil and a high-quality final drawing prepared in ink. Each of the final drawings was reviewed by two monk students of the Buddha Footprints in Myanmar and adjusted where necessary. Later, I reviewed each drawing from the perspective of a Buddha Footprint scholar with knowledge of the Asian perspective of the subject.

A monk student who, in recent years, has assembled and studied six palm-leaf copies of the Myanmar script Pāli text *jinālaṅkāraṭīkā* then reviewed the final drawings. The *Jinālaṅkāra-īkā* was written in Sinhala script Pāli in AD 1157 in Rohaṇa, Śrī Laṅkā. Between us, we determined the most common spelling for the term to apply to each of the auspicious illustrations. During this process, we discerned in some instances that the spelling disagreed with the normally accepted Pāli forms.

When the 108 auspicious illustrations were suitably named with their Pāli terms I provided suggested translations of each. The translations are based on my understanding of the Myanmar illustrations of the Kon-baung Dynasty, AD 1752 to 1885, and from a background of study and reading of more than 400 Buddha Footprints distributed throughout Asia.

My first Footprint 'Reading' was completed some ten years ago and was of a



Myanmar Buddha Footprint. An interpretative article was written in English and published in Thai. My second 'Reading' was in Śrī Laṅkā of the Royal Gift of the third last king of the Ayutthaya Dynasty, AD 1350 to 1767, to the second last king of the Kandy Dynasty, AD 1469 to 1815, Kandy, 'Śrī Laṅkā. My 'Readings' have progressively improved, just as this will improve upon my earlier ones.

My current research leads me to conclude that the 108 auspicious illustrations form part of a grand and larger artefact. Line drawings of this artefact were prepared by two Indian students and finalised by two Myanmar students. The first drawing was prepared on ordinary paper as the Buddha Footprint is a bas-relief in alabaster. The final drawing was created using high-quality permanent pen for conversion to clear outlines on high-quality large format film. The depiction was then photo-reduced to A4 size and is now included with this article.

The sequence and movement of the illustrations is from left to the right, which Buddhists regard as an auspicious movement. Through the use of a computer, each space was assigned a number, giving the proper method for 'Reading' the sequence of auspicious illustration.

Close examination of the minute detail on the Footprint, yielded some highly unique illustrations. A *haṃsa* is present. In Myanmar this is referred to as *hin-tha*. The *hin-tha* is a migratory duck from Central Asia. Only six indigenous ducks and twenty-eight known species reside in Myanmar for various periods each year. The

duck foot iconography appears to be holding a ball. I have not identified this form in similar Footprint examples in Myanmar. The duck has an appearance similar to wild chicken that occurs in limited examples in Myanmar and on a grand scale in Thailand. I suggest that this is the leading symbol of Metteyya the future Buddha. As few critical studies exist, it will be necessary to await further data.

This Footprint contains just one instead of two elephants. This I suggest is another characteristic of a Metteyya, the future Buddha.

In conclusion, one bird, known in Pāli as *karivika*, is thought as being of mythical origins throughout southeast Asia. The example present of the alabaster Footprint is a bird with a comb. The term is defined as cuckoo in Sinhala dictionaries and Pāli-English dictionaries prepared by Western societies.

With the foregoing explanations as a background, I attempt to provide additional 'Readings' of the Footprint. The illustrations have a particular sequence that commences at a precise point near to the centre, and then moves in an auspicious manner until all the 108 auspicious illustrations are included. I have assigned the correct Pāli terms, according to the list provided in the original Sinhala script Pāli text of *Jinālaṅkāraṭīkā*. My student in Myanmar provided a line drawing, with the assistance and supervision of U Win Maung, of Tampawaddy, Mandalay, Myanmar, and myself. In Myanmar, knowledge and understanding of the 108 auspicious illustrations



on the soles of a Buddha is gradually being expanded. In conclusion, I offer a suggested translation of the term in association with a line drawing based upon the Theravāda Buddhist tradition of the Kon-baung dynasty.

The 108 auspicious illustrations are grouped into three, creating a cosmology. The first 86 belong to the *manussa* or human world or plane. The next six belong to the *deva* or celestial worlds or plans with the remaining 16 belong to the higher celestial beings or Brahma worlds or planes.

To date, I have examined more than 400 examples of such Buddha Footprints in the southeast Asia with each displaying a wide range of differing interpretations. Limited research studies and publications relating to the Buddha Footprints have been undertaken so far, rendering limited reference resources. My own research indicates that although the Buddha Footprint is a central theme in southeast Asian cultures, this remains to be a desirable topic of major study.

Some ten years hence I expect that I would be able to provide additional and possibly more accurate information. However, present research supports my current

explanations. It should be remembered that the tradition is waning rapidly. Although a few people have undertaken concentrated efforts the knowledge so far assembled remains limited. Additional time, energy and funding are needed to continue the process of discovery.

Two exceptions to the 'Reading' are made. Number 71 is given as *uposathavāraṇāṇā*, a term included in the fifth century AD text of *Samanta-bhaddikā* of which printed copies do not exist. Palm leaf copies of the text exist in Myanmar and Thailand. Currently, this text is being prepared for publication to celebrate the 72nd birthday of His Majesty, King Bhumibol Adulyadej of Thailand in 1999.

The same term in the AD 1157 text is given as *uposathahatthirāṇā*. The term *chaddantarāṇā*, from the same text, is not given and the Metteyya Buddha Footprints normally contain just one elephant.

The second exception is the illustration number 73. *jinālaṅkāraṭīkā* lists *haṇṣa* but *Samanta-bhaddikā* lists *kukkūṭa*. My 'Reading' is that it is a wild chicken gripping a ball shaped form rather than a duck.

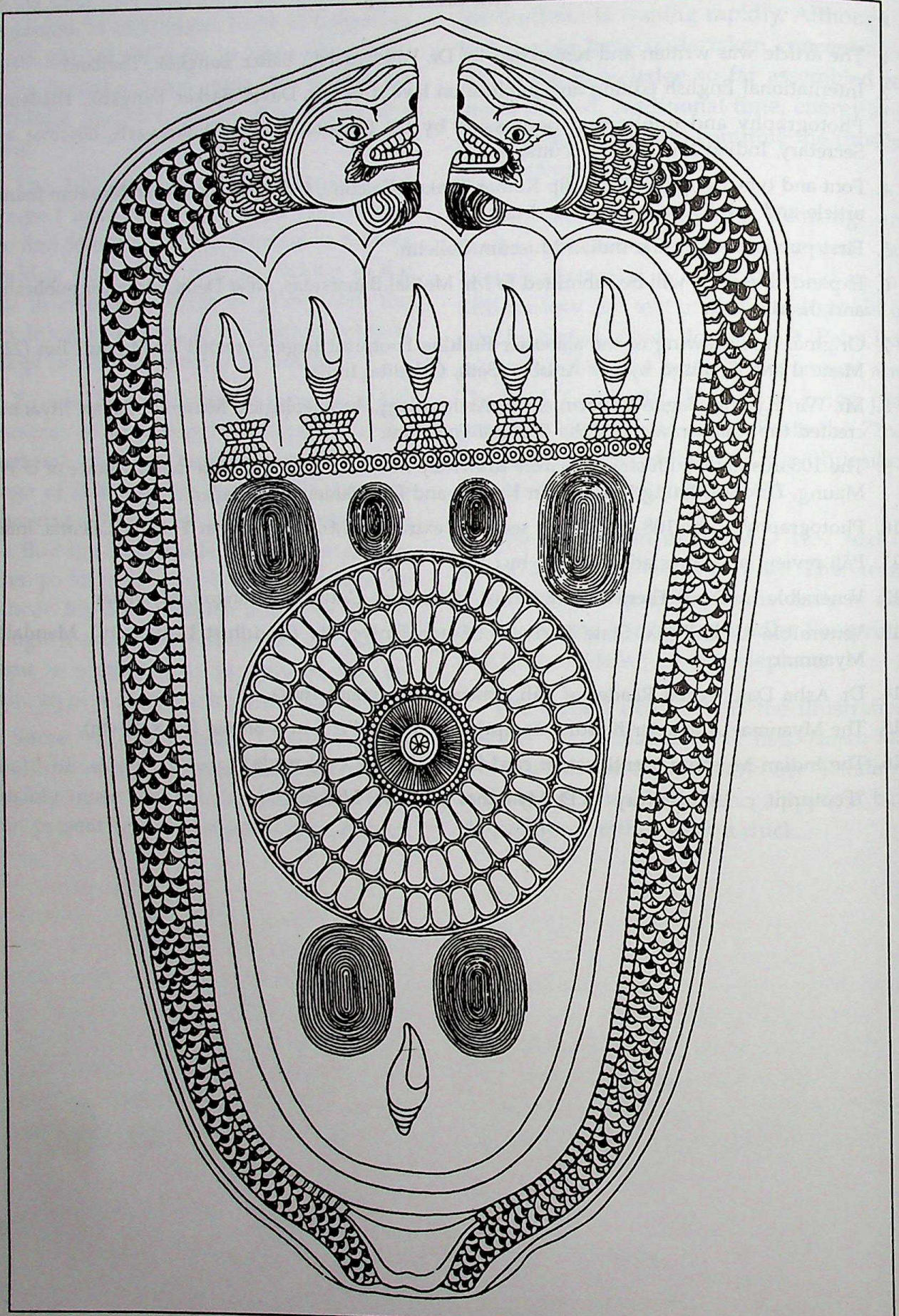


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1. The article was written and researched by Dr. Waldemar C. Sailer, Bangkok, Thailand.
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4. Font and type design by Mr. Dilip Kumar Thakur, Calcutta, India, for the Indian Museum Journal article and a subsequent expanded text.
5. First publication for the Indian Museum Bulletin.
6. Expanded version will be submitted to Mr. Motilal Banarsidas, New Delhi, India for publication and distribution.
7. Original line drawing of the alabaster Buddha Footprint largely created by Mr. Tun Tun (22N) Mandal and finalised by Mr. Anirban Seth, Calcutta, India.
8. Mr. Win Kyaing, Bagan Department of Archaeology, Archaeological Museum, Bagan, Myanmar, created the final drawing of the Buddha Footprint.
9. The 108 auspicious illustrations were drawn by Mr. Than Chaung, with the assistance of U Win Maung, Dr. Tin Maung Kyi, U Win Kyaing and Dr. Waldemar C. Sailer.
10. Photography of the 108 details and sectional extract by Mr. Dilip Kumar Thakur, Calcutta, India.
11. Pāli review and translation review by :
12. Venerable U. Dipa, Theravāda Buddhist Missionary University, Yangon, Myanmar.
13. Venerable U Sādhina, State Pariyatti Sāsana University (Buddhist University), Mandalay, Myanmar.
14. Dr. Asha Das, retired Reader of Pāli, Calcutta University, India.
15. The Myanmar Alabaster Buddha Footprint measures 7ft 5 in × 3ft 6in (81 × 45 cm).
16. The Indian Museum identification card in the display card reads :  
"Footprint, c. 19th century A.D. Myanmar. Acc. No. Nil"

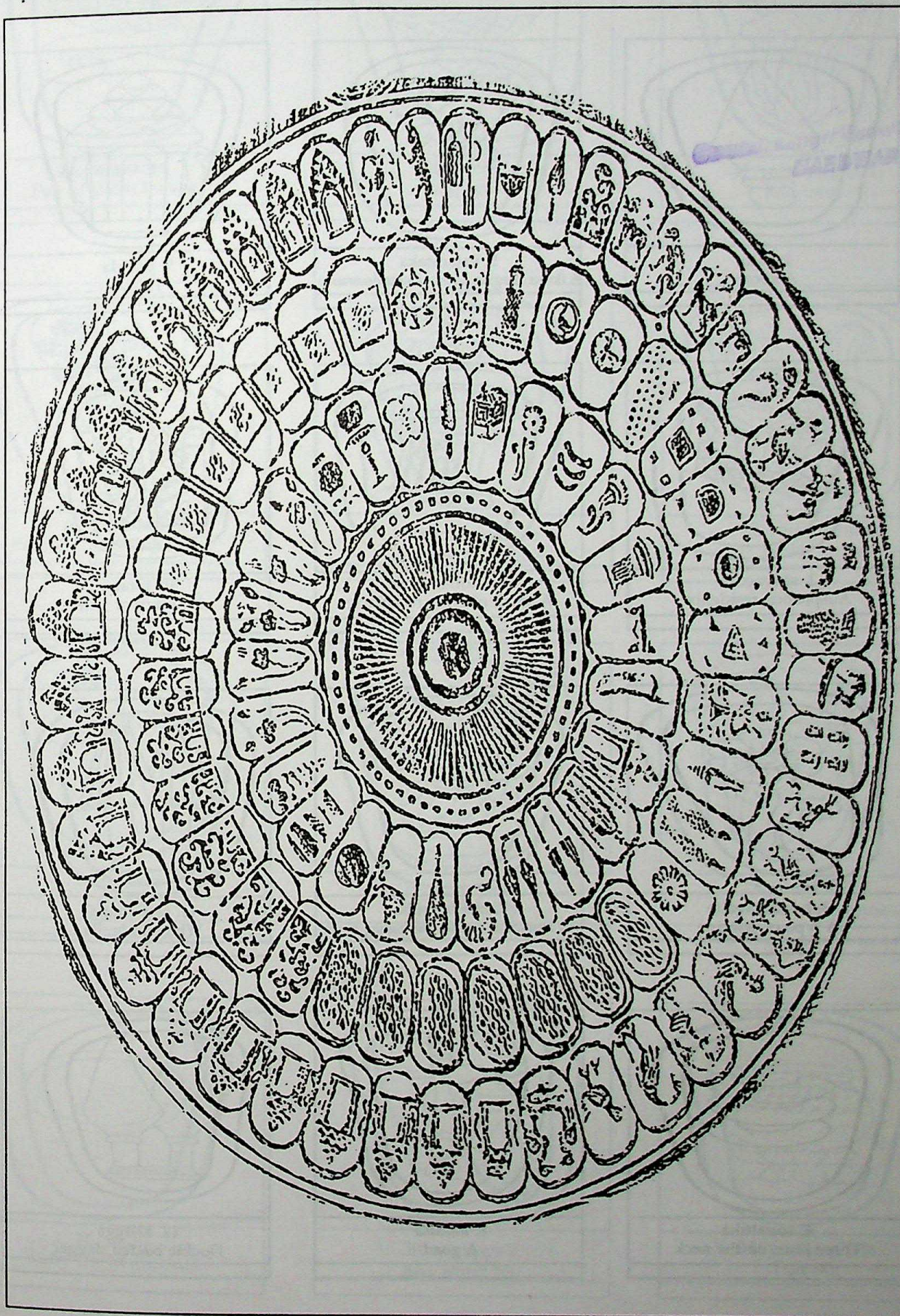


A drawing of the alabaster Buddha Footprint in the Indian Museum, Calcutta





The first stage in the 'Reading.' A pencil rubbing of the alabaster Buddha Footprint in the Indian Museum, Calcutta

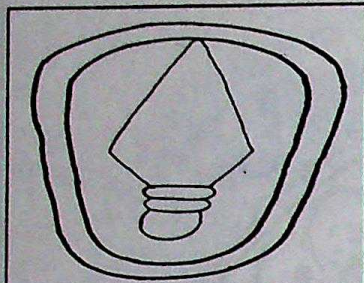




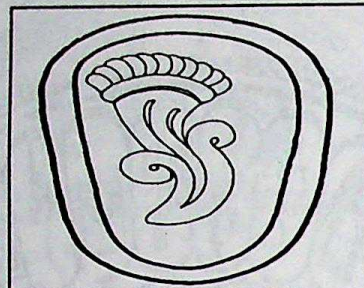
# Reading' of auspicious illustrations

## Manussa Loka

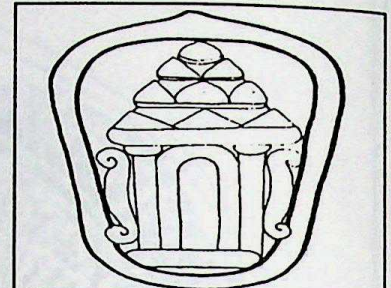
### The human world of plane



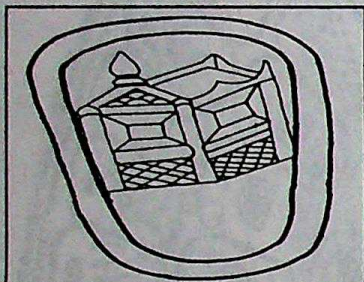
1. śātti  
A spear



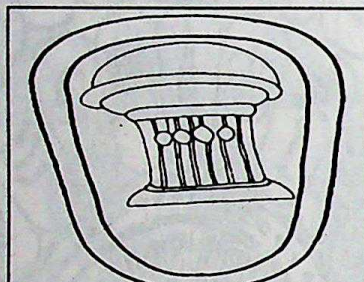
5. vaṭṭamsaka  
A flower hanging down - an ear decoration



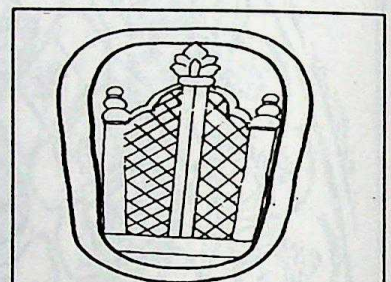
9. pāsāda  
Palace



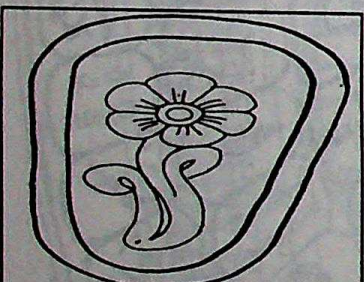
2. sīrivaccha  
Auspicious residence



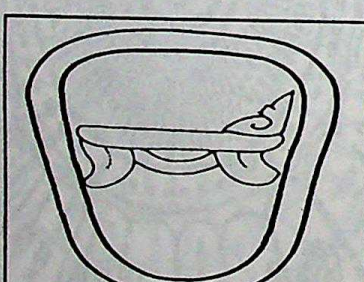
6. vaddhamānaka  
A small offering receptacle



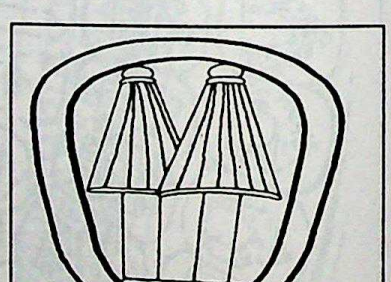
10. toraṇa  
Entrance or gate



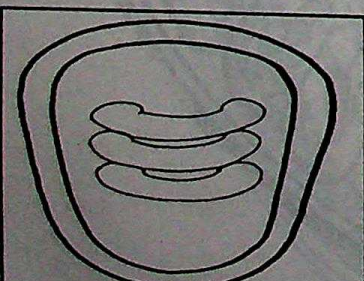
3. nandiyāvaṭṭa  
A type of jasmine



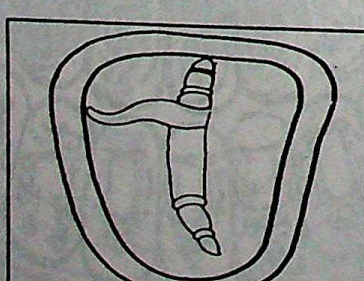
7. bhaddapiṭṭha  
An auspicious seat for the leading monk



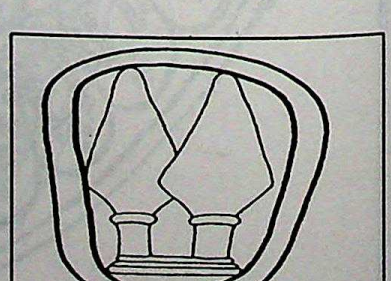
11. seta-chatta  
White umbrella



4. sovattika  
Three lines on the neck

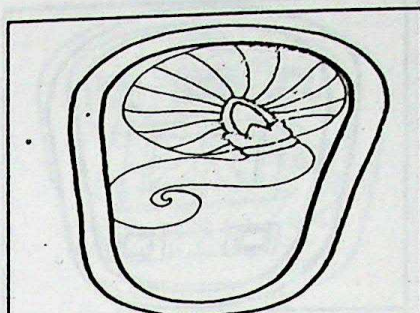


8. ankusa  
A goad

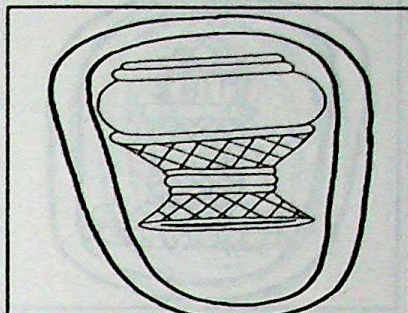


12. khagga  
Double bladed dagger

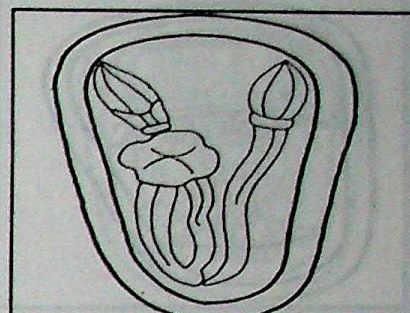




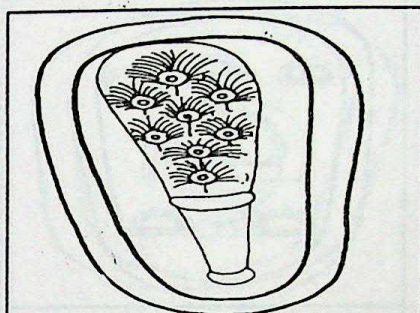
13. talavaṇṭa  
Fan of palm leaves



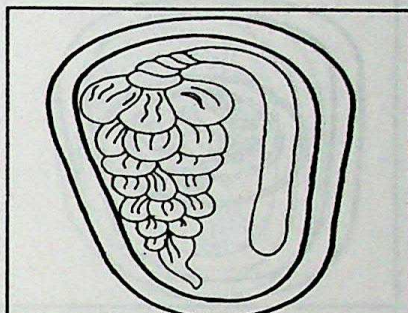
17. patta  
Alms bowl



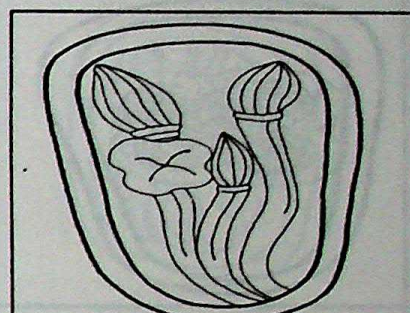
21. ratta-paduma  
Red lotus



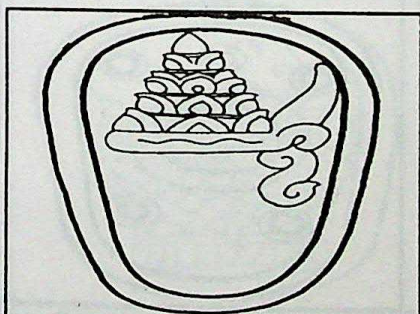
14. mayūra-hattha  
Peacock tail feather fan



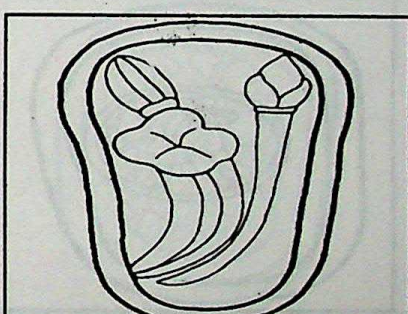
18. sumana-dāma  
Garland of jasmine



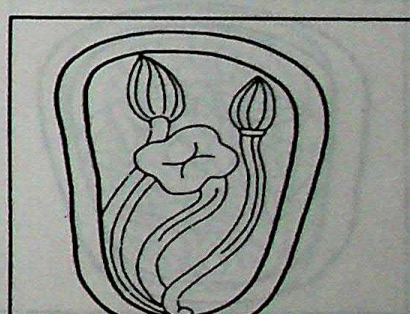
22. seta-paduma  
White lotus



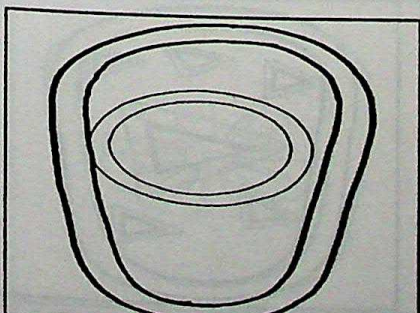
15. uṇḥissa  
Crown



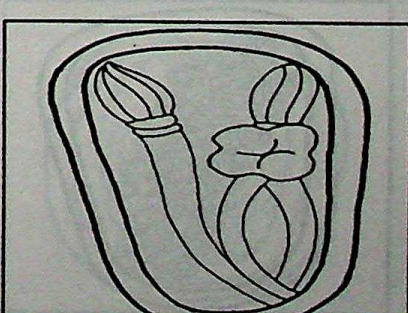
19. niluppala  
Blue water lily



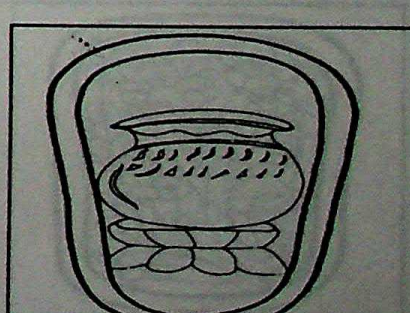
23. pund arika  
Special white lotus



16. maṇi  
Ruby (In Myanmar)

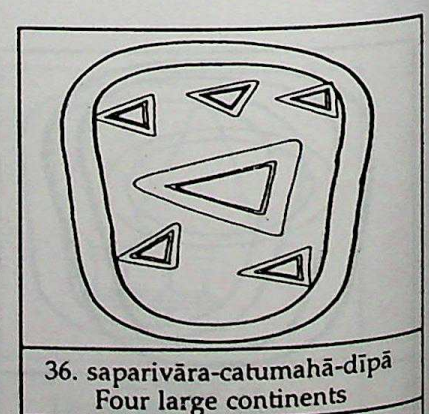
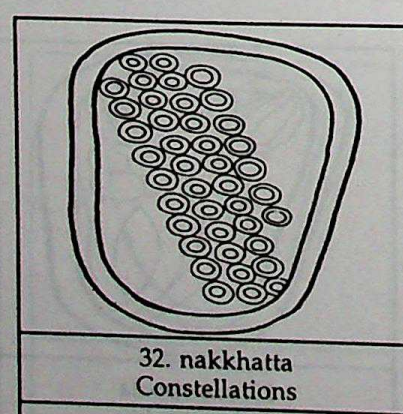
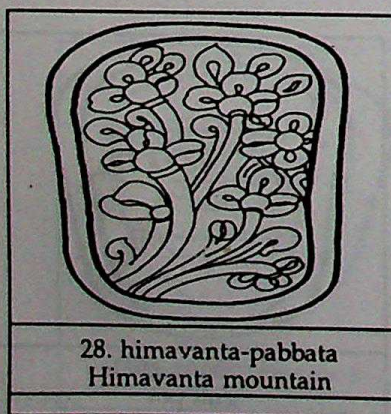
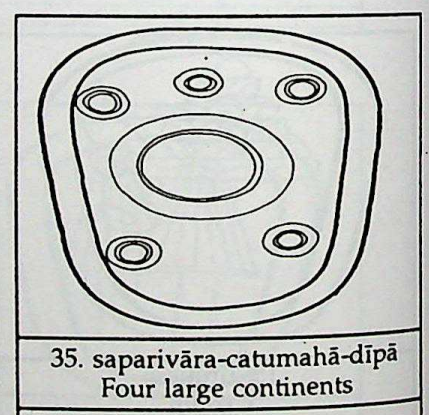
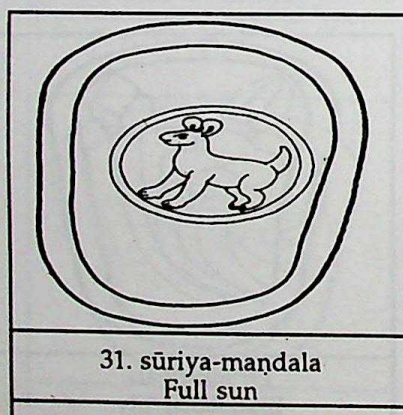
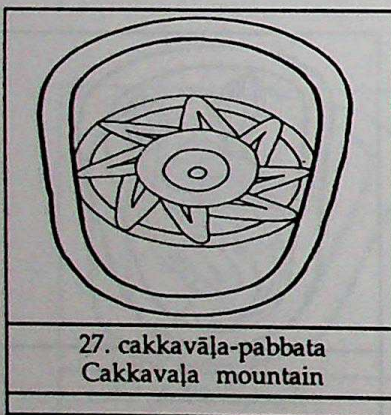
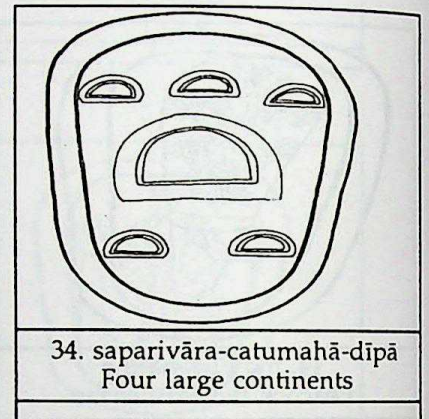
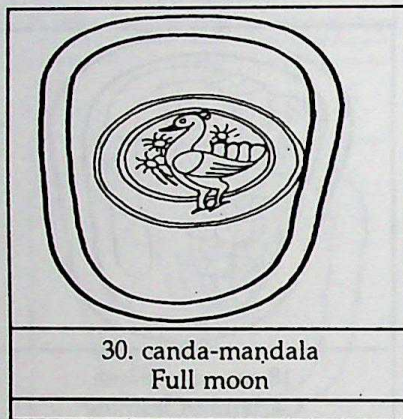
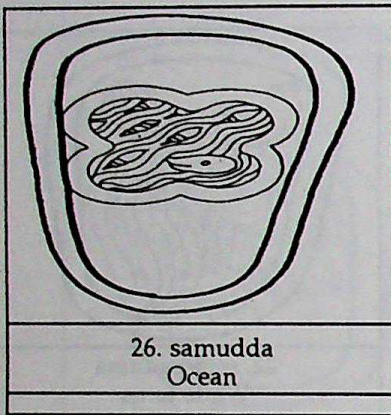
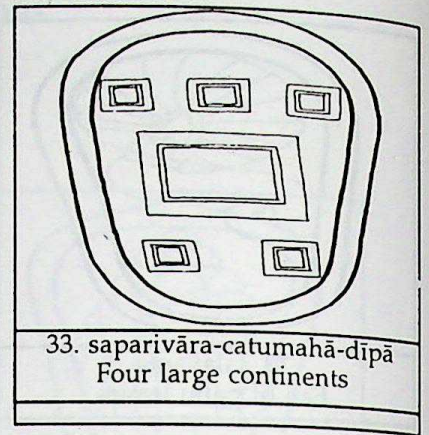


20. rattuppala  
Red water lily



24. punna-ghaṭa  
Full pot

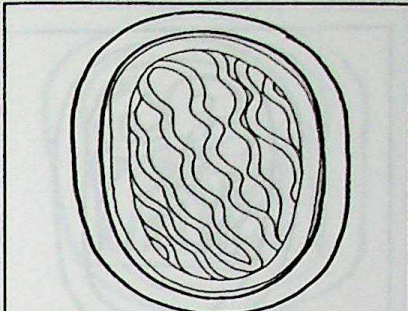




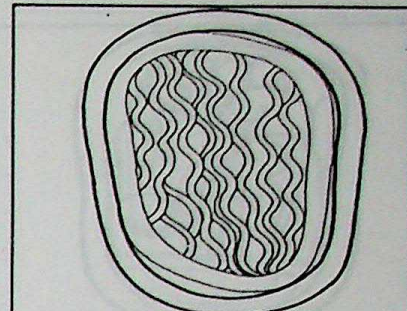




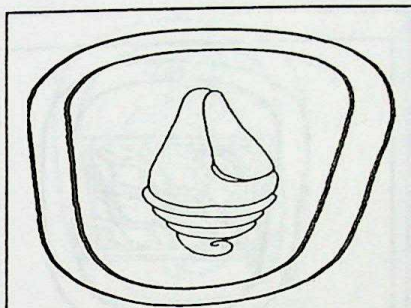
37. sāparivāsa-satta-ratana-sama-gī-cakkavatti  
Legendary king Cakkavatti surrounded by his seven treasures



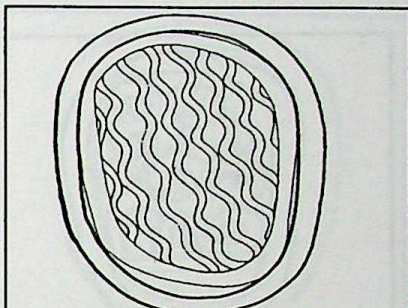
41. satta-mahā-gaṇḍā  
Seven long rivers



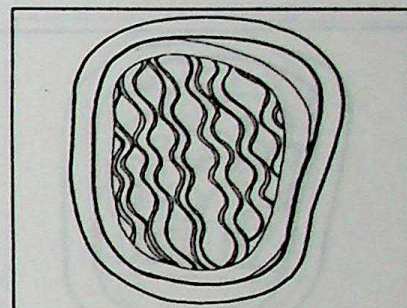
45. satta-mahā-gaṇḍā  
Seven long rivers



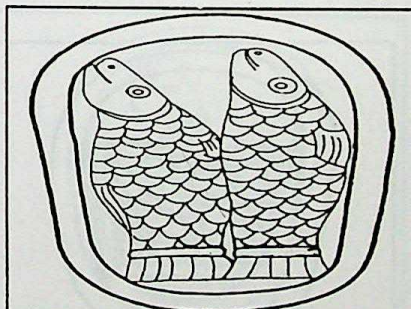
38. dakkhiṇavatta-seta-sankha  
White conch that spirals to the right



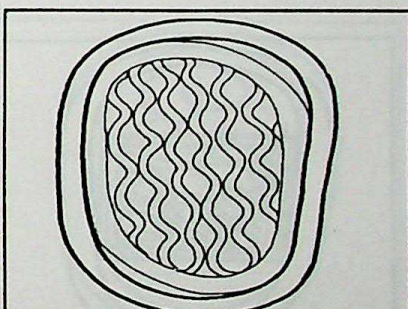
42. satta-mahā-gaṇḍā  
Seven long rivers



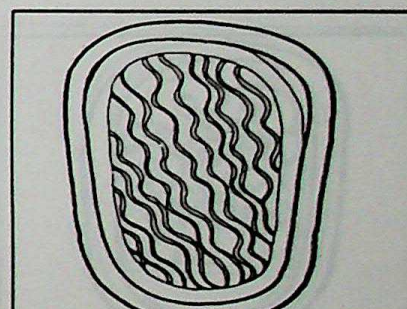
46. satta-mahā-gaṇḍā  
Seven long rivers



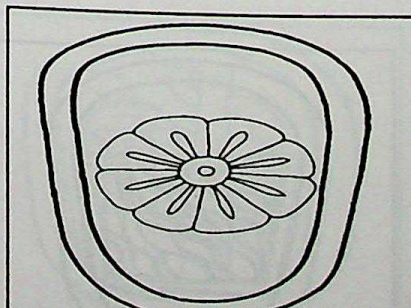
39. suvaṇṇa-maccha-yugala  
Pair of golden fish



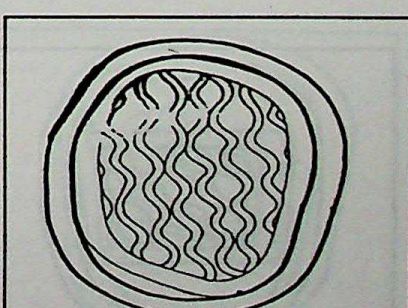
43. satta-mahā-gaṇḍā  
Seven long rivers



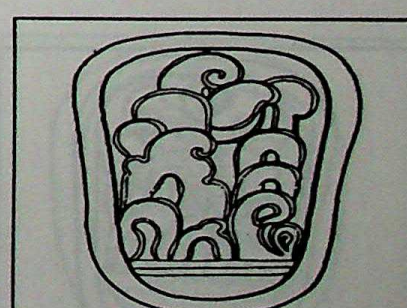
47. satta-mahā-gaṇḍā  
Seven long rivers



40. cakkayudha  
Cakka, a mythical weapon

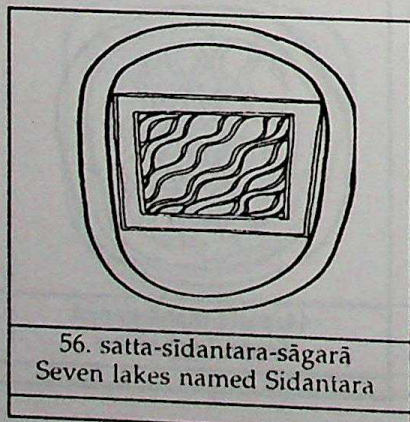
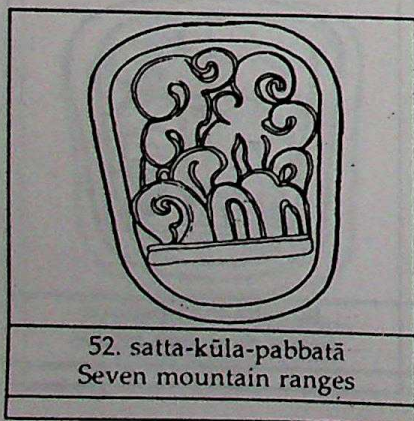
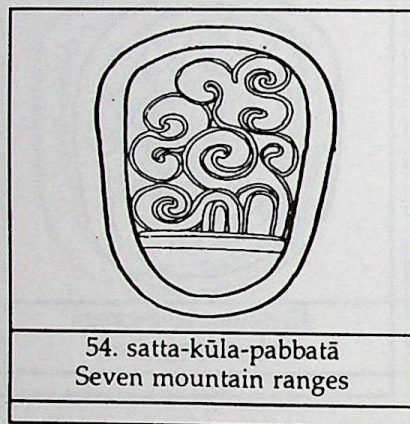
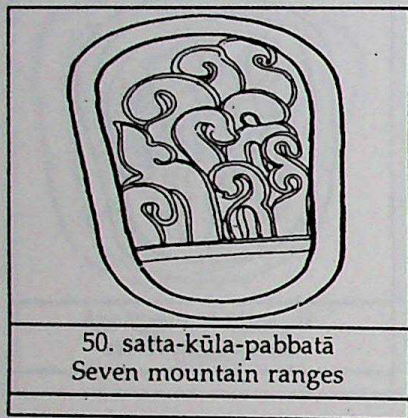
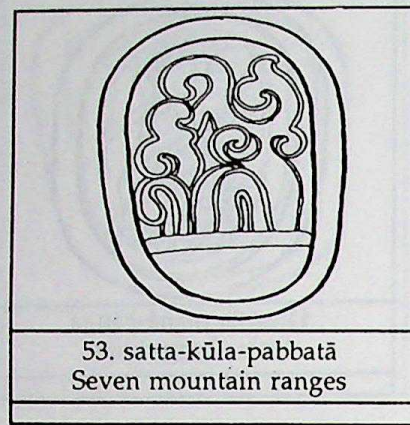


44. satta-mahā-gaṇḍā  
Seven long rivers

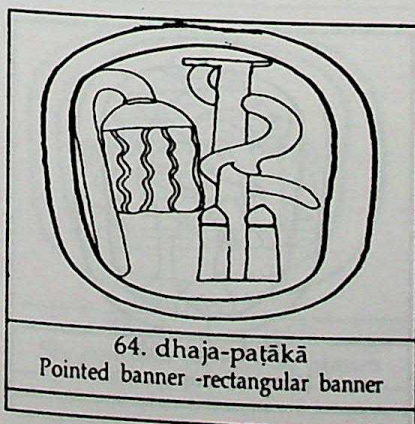
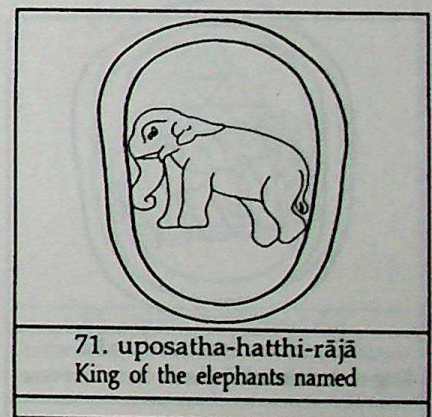
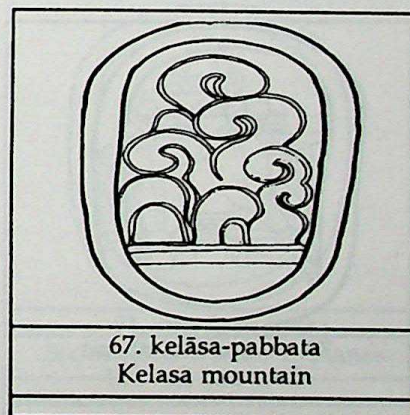
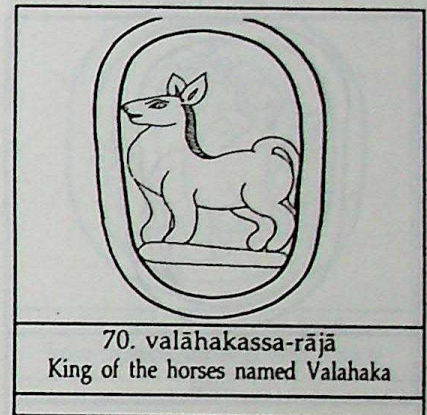
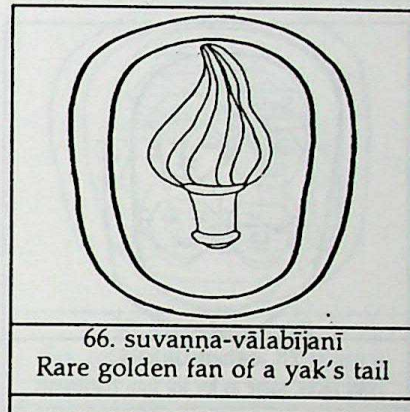
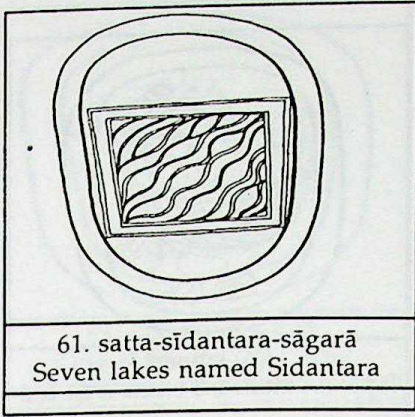


48. satta-kūla-pabbatā  
Seven mountain ranges

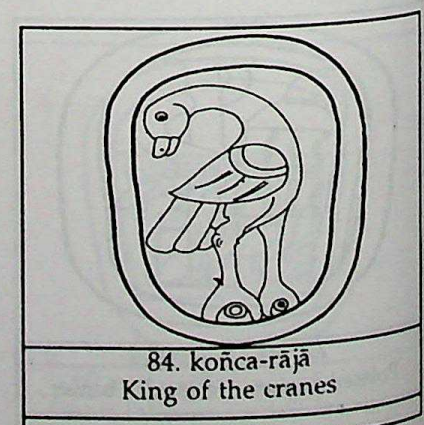
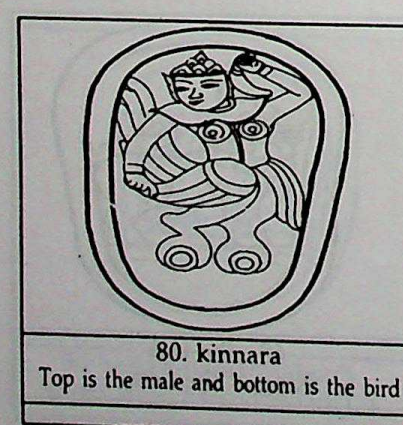
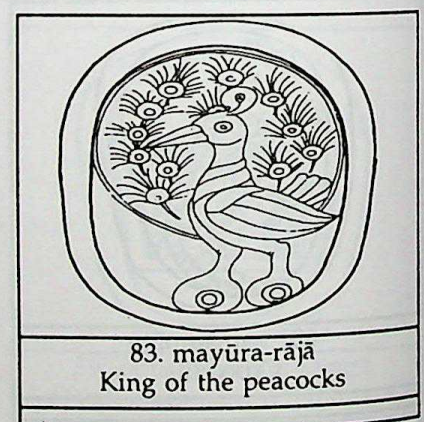
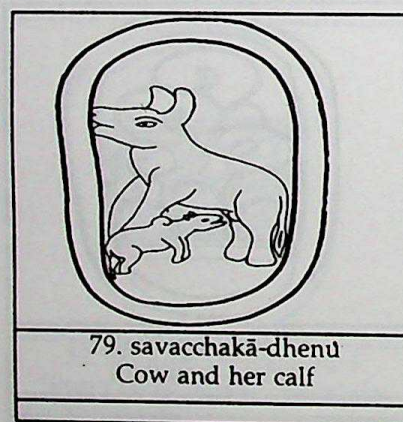
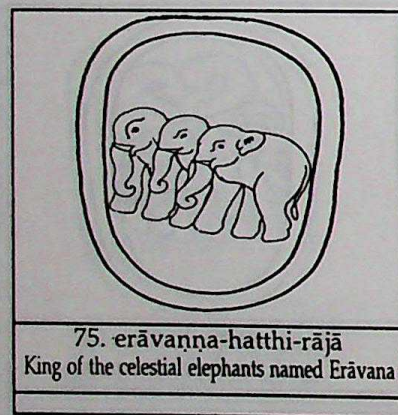
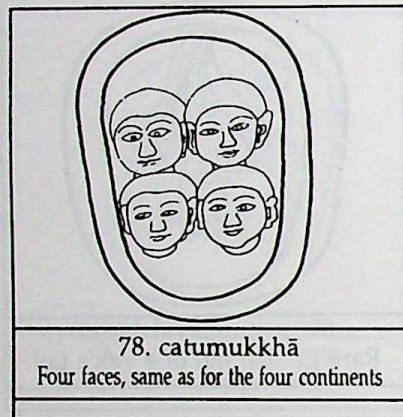
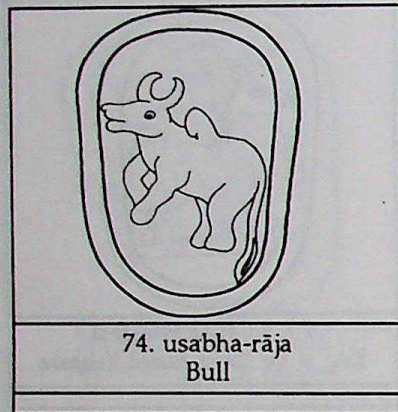
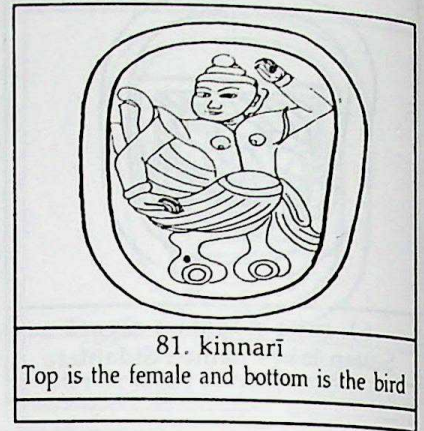
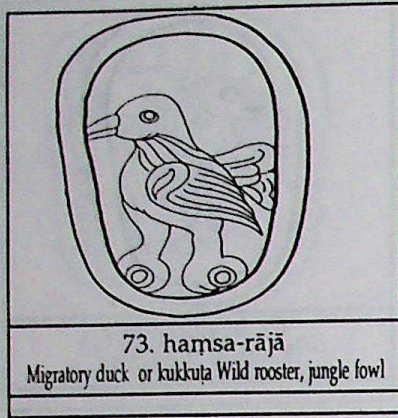




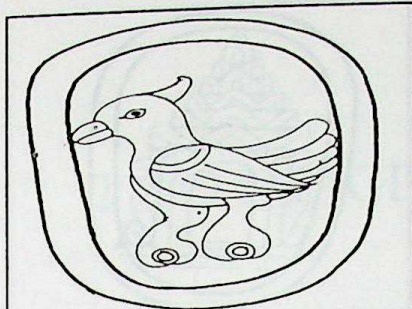




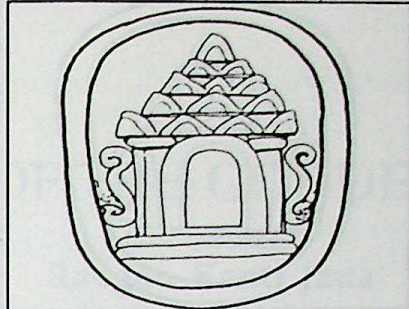




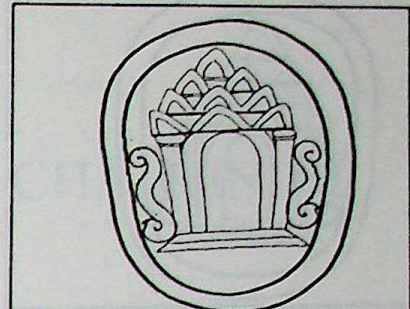




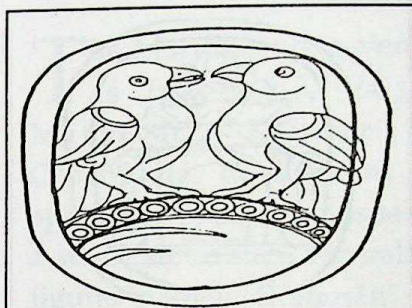
85. cakkavakka-rājā  
King of the Ruddy Goose



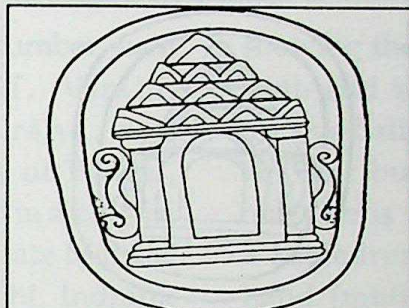
89. cha-deva-lokā  
Six celestial worlds or planes



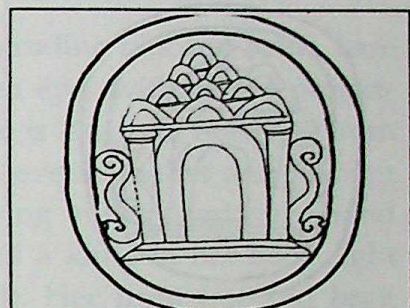
93. cha-deva-lokā  
Six celestial worlds or planes



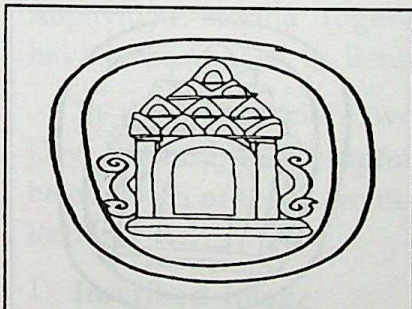
86. jīvajīvaka-rājā  
King of the swiftlets, but pair is not noted in text



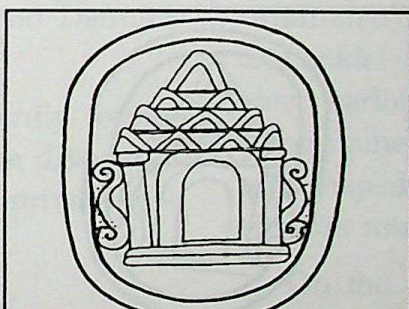
90. cha-deva-lokā  
Six celestial worlds or planes



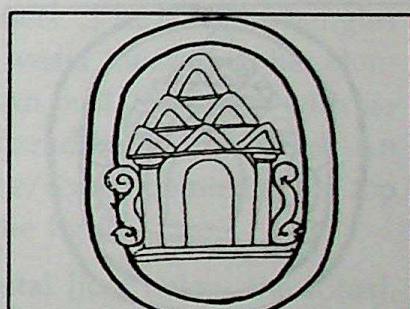
94. Soḷasa-brahma-lokā  
Sixteen Higher Celestial Being's Worlds or planes



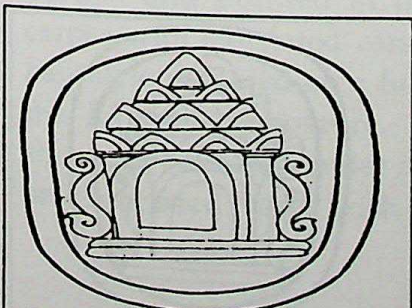
87. cha-deva-lokā  
Celestial being's worlds or planes



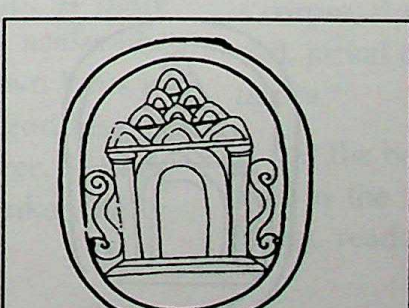
91. cha-deva-lokā  
Six celestial worlds or planes



95. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



88. cha-deva-lokā  
Six celestial worlds or planes

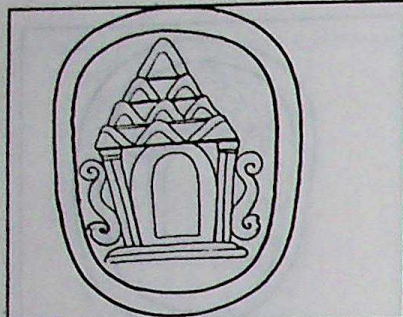


92. cha-deva-lokā  
Six celestial worlds or planes

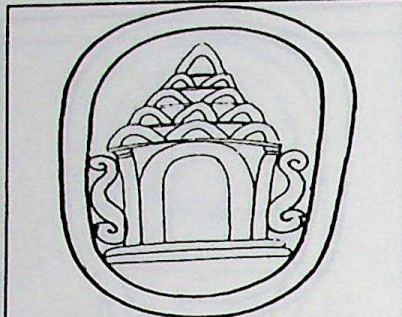


96. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes

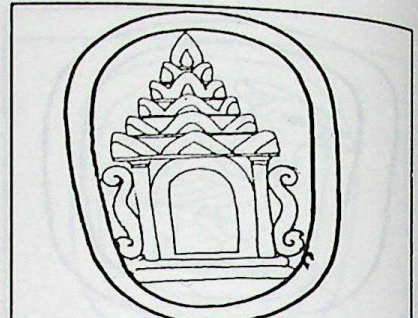




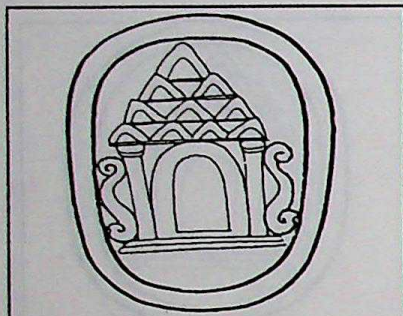
97. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



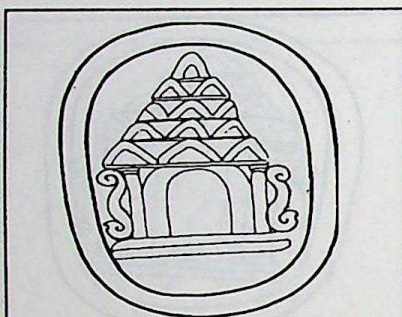
101. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



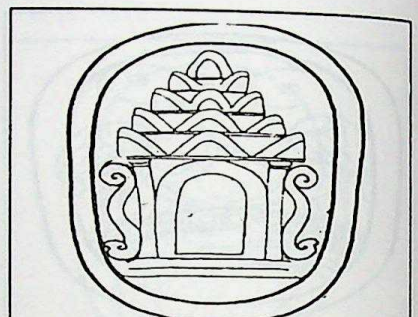
105. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



98. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



102. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



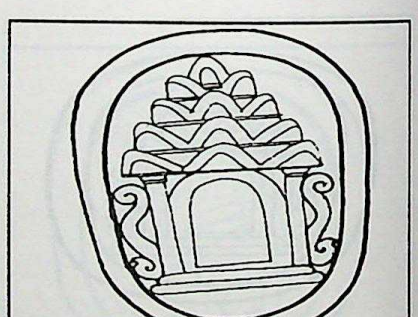
106. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



99. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



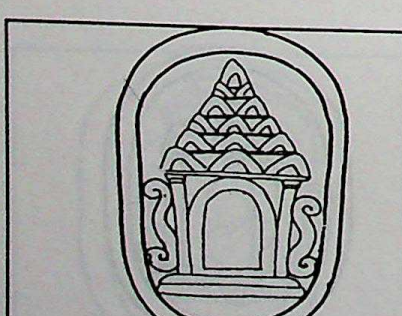
103. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



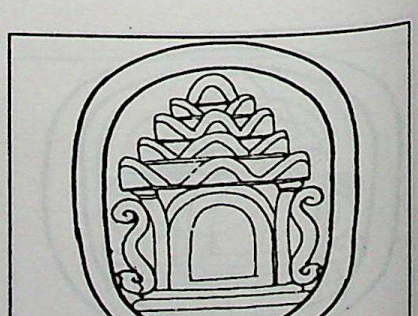
107. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



100. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



104. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



108. soḷasa-brahma-lokā  
Sixteen higher celestial worlds or planes



## TWO IMAGES OF THE GODDESS CHĀMUṆḌĀ

Rangan Kanti Jana

The Mātrikās are seven in number such as Brahmāṇī, Vaishnavī, Varāhī, Māheśvarī, Kaumārī, Indrāṇī and Chāmuṇḍā. In different parts of Bengal, apart from their composite relief in a row on a single stone slab, several separate Mātrikā figures namely Brahmāṇī, Varāhī, Indrāṇī, and Chāmuṇḍā have been found. Mostly they are kept in different public and private collections. In case of Devi Chāmuṇḍā's sculpture, her various forms such as Rūpavidyā, Siddha Yogeśvarī and Danturā have been noticed in Bengal.

In this connection two recently found Devi Chāmuṇḍā's sculptures are discussed below. Both of them are now in private collection.

### 1. Inscribed Image

The four-armed goddess Chāmuṇḍā is seated on a corpse with her slightly raised right knee (mutilated). The stela is slightly broken and pointed at the top. A male corpse with elongated ears and *uṣṇīsa*-like hair style is placed on a full-blown lotus in the *Kāyotsarga* posture. The goddess is shown to be seated under a fig tree. She has an emaciated body with shrunken belly

showing the protruding ribs and veins, bare teeth and sunken eyes with round projecting eye-balls. She is laughing horribly. From her hair bunch several snakes are peeping out. She is carrying in her front right hand a kettledrum and a knife in her back right hand (mutilated). Her front left and back left hands hold trident and human skull respectively. Her lower body is draped in a tiger's skin, and bejewelled with a necklace, *Yajñopavita*, a garland of skulls and bones (mutilated), armlets, a number of bangles and anklets. She wears *Kuṇḍalas* in her elongated earlobes. An oval *Śiraścakra* with issuing flames is found behind her head. An oval shaped flame/screen pointed at the top appears round the figure.

On the pedestal [just below the lotus], from the right side of the divinity, are found engraved in a row a small *liṅga*, a plump figure of a devotee kneeling on the proper right knee with folded hands, a Vulture on a corpse, three human skulls on a stand, an owl, jackal on a corpse and an unidentified figure.

At the bottom of the pedestal an inscription in the 10th-11th century Brāhmī characters, reads as follows—



**Dasharikāṅgā chārugrāmyat pradayita**

It could be read as "[Iyan pratimā] Daśarikāṅgayā chārugrāmāt pradapayita"—which means this image (is) caused to be given by the order of Daśarikā of Chārugrāma.

Black Stone

49 cms × 24 cms

Gangarampur, South Dinajpur

**2. Uninscribed Image**

The goddess Chāmuṇḍā is seated on a full-blown double-petalled lotus with her pedant proper right leg resting on the hip of a plump human figure. The reclining human figure supports its head on the proper left hand. The stela is square on the top. The goddess has an emaciated body with shrunken belly showing the protruding ribs and veins, bare teeth (mutilated),

and sunken eyes with round projecting eyeballs. Her hair is bunched upwards. She is bejewelled with a necklace, a garland of skulls and bones, a number of bangles and anklets, *Kuṇḍalas* in her elongated earlobes. She has eight hands. Her first left hand rests on her left knee, second one is raised upwards and touches her lips, holding closely a trident, third one holds a human skull below which is a small jackal and the fourth one is raised upwards holding the back portion of the elephant-skin. On the other side, her first right hand holds a dagger, second one holds a kettledrum, third one holds a lasso (mutilated) and fourth one is raised upwards holding the front portion of the elephant-skin.

Black Stone

52 cms × 33 cms

Gangarampur, South Dinajpur



# THE 13TH CENTURY SAIVA COMPLEX IN ANDHRA PRADESH

Krishnendu Ray

## I

The early mediaeval phase from c. A.D. 600 to 1200 A.D., is marked by the changing socio-economic and cultural life rooted into regional resources. The religious life also of the period under review is characterised by the growing popularity and spread of *Bhakti* ideology which led to the rise of a number of sectarian Brahmanical cults such as Vaiṣṇavism, Śaivism etc. Brahmanical *bhakti* cults occasionally assumed the form of large religious establishments or *mathas*. These preliminary remarks may help orient the content of the present paper dealing with an impressive Śaiva complex known as the Golaki *maṭha* about which details are available from an inscribed stone pillar<sup>1</sup> in front of a ruined Viśveśvara temple at Malkapuram in the Guntur district of Andhra Pradesh.

## II

The Mattamayūr Śaiva ascetic Viśveśvara Śambhu the royal preceptor of the Kākatīya ruler Gaṇapati (A.D. 1199-1261) is well-known to have got constructed the huge

Golaki *maṭha* which he re-named Viśveśvara-Golaki at Malkāpuram. But the acceptance by the Kākatīya reigning house of Viśveśvara Śambhu seems to have not been an isolated fact. To understand this, it may not be out of focus to look into the background in brief.

The Mattamayūra Śaiva *ācāryas* are known to have been institutionally settled and at their philanthropic activities in central and eastern India by the tenth century A.D., according to a number of inscriptions found at Gurgi<sup>2</sup>, Chandrehe<sup>3</sup> and Ranipur-Jharial<sup>4</sup>. Their philanthropic activities made them popular among the masses. And their mass popularity might have invited the attention of the royal house. And the royal house in turn patronised the Śaiva saints for the sake of consolidating its power among the masses. Examples in this regard are not far to seek.

The Kalachuri King Yuvarāja I (A.D. 940) brought Prabhavaśiva of the Mattamayūra line to the Chedi country Dahala *maṇḍala* (situated between the Narmada and Bhagirathi (78° E Long, 30°N. Lat.) it corres-



ponds to the country round the modern town of Jabalpur)<sup>5</sup>. And Yuavarāja I made Prabhavaśiva accept a monastery which the King built up at the cost of a large sum of money (*Śrīmat - Prabhavaśiva - namamunir = manisī - āniya ... Yuvarājadeva .... maṭham = ananta - dhana - pratiṣṭhām*)<sup>6</sup>. In the Chedi country there flourished a line of Śaiva ascetics whose spiritual guru was Durvāsā. In this line appeared Sadbhāva Śambhu who received from Yuvarāja I three - lakh province (that is the province where there were three lakhs of villages) as a gift for maintenance (*bhikṣā*). And Sadbhāva Śambhu donated that province as the *vr̥tti* to the Śrī Golaki - *maṭha* founded by him for the maintenance of the Śaiva ascetics of that *maṭha*<sup>7</sup>. Thus with royal patronage the Golaki-*maṭha* became a famous centre of the Śaiva ascetics of the Mattamayūra line. To this *maṭha* came from the Kerala country Vimalaśiva, another Mattamayūra *ācārya* who was highly respected by the Kalachuri King (*Yaśaḥ Pūrassvera stavakitadiśaḥ Keralabhavāstaṭaḥ padmavāsā Vimalaśivapādā ssamabhavam*)<sup>8</sup>. His favourite Śaiva scholar was Dharmasīva/Śambhu<sup>9</sup>. And Dharmasīva's righteous son (*Dharmatanaya*)<sup>10</sup> was Śrīviśveśvara Śambhu who lived at the village of Pūrvagrāma of Dakṣiṇa-Rāḍha (comprising modern Bhursut and Navagrama in the Howrah and Hooghly districts and Damunya to the west of the Damodar in the Burdwan district)<sup>11</sup>. To the tradition of these Mattamayūra Śaiva *ācāryas* he belonged as a successor. Viśveśvara Śambhu was the spiritual preceptor (*Dikṣā - guru*) of the Kalachuri royal house (*Śrīviśveśvaradeśika Kalachurikṣa mapāla*

*dikṣāguruḥ*)<sup>12</sup>. Viśveśvara Śambhu's righteousness as well as spirituality may be supposed to have been so much so that his devotees/disciples included also the Chola and Mālava Kings (*Śrī Choleśvara Mālava Kṣitipati rājnyacuḍāmaṇi Yatcehiṣyau....*)<sup>13</sup>.

The Mattamayūra Śaiva *ācāryas* under the righteousness of Gaganaśiva who came from Uttara-Terambagriha (modern Terahi half way between Jhansi and Ranod, Madhya Pradesh) had spread their philanthropic culture at Ranipur -Jharial ( a village about 21 miles west of Titilagarh, Orissa) in Orissa by the first half of the 10th century A.D.<sup>14</sup>. The Mattamayūras here were patronised by the Somavarṇsis who thereby tried to make themselves acceptable to the local people.<sup>15</sup> Again it was in endeavour to consolidate royal power among the masses.

So the Mattamayūra Śaiva ascetics may be assumed to have carried on a movement for disseminating their faith through charitable activities in central and eastern India. Obviously under the umbrella of royal support and patronage. This tradition along with Viśveśvara Śambhu's popularity, particularly with the reigning houses might have led the Kākatīya ruler Gaṇapatideva to associate himself with the Śaiva ascetics of the Mattamayūra line. The result was Viśveśvara's becoming spiritual guide (*dikṣā - guru*) of Gaṇapatideva also. Thus by recognising Viśveśvara Śambhu as royal preceptor Gaṇapati not only tried to consolidate the royal power among the masses, but also to establish that the Kākatīyas had also the same royal position as the Kalachuris had.



The matter concerning Viśveśvara Śambhu's becoming so important may be thought of further. The patronage to the Golaki *maṭha* and its founder Viśveśvara Śambhu seems to have begun during the time of Gaṇapati and was subsequently formalised during her daughter's reign. In terms of dynastic succession Rudrāmbā's accession to the throne was unusual since Gaṇapati had no male heir. There is no direct/explicit mention of any dispute about Rudrāmbā succeeding Gaṇapati to the Kākatīya throne except some hints at Rudrāmbā's accession to the throne in the rather late text *pratāpacarita*. It may not be entirely impossible that Rudrāmbā patronised Golaki - *maṭha* and Viśveśvara Śambhu as a mark of fulfilling her father's wishes - an act by which she could signify and symbolise that as legitimate successor to her father she was continuing and consolidating Gaṇapati's policies. The support of Viśveśvara Śambhu who had been preceptor to a number of other powerful rulers could have given the female ruler of the Kākatīya Kingdom some political mileage.

Before leaving the point of Viśveśvara's acceptability in this fashion to the Kākatīya reigning house, the word *dharmmatanaya* describing him deserves our attention. The word *dharmmatanaya* may be explained in the light of the *Kalyāṇamitta Sutta* of the *Saṃyutta Nikāya* (dated to the period earlier than the 2nd and 3rd quarters of the 3rd century B.C.). According to this Sutta, the most successful means of perfecting the Noble Eightfold way is no other than the performance of good deeds for the welfare of the common many. It emphasises

*Kalyāṇamittatā*

*Kalyāṇasahāyatā*

*Kalyāṇasampavaṇkatā* meaning a virtuous friend helping/doing good for the people<sup>16</sup>. The word *Sampavaṇkatā* means friendliness, intimacy<sup>16a</sup>. This meaning fits in well with the deeds Viśveśvara Śambhu performed by organising the Golaki - *maṭha* on which attention may now be focussed.

### III

Gaṇapatideva's daughter and successor Rudrāmādevī (A.D. 1261-97), according to her father's desire (*tadanujñayā*), on the 8th day of the month of Chaitra and the 1st day of Mesa (*i.e.* 25 March, 1261 A.D.), granted to Viśveśvara Śambhu, the village of Mandaram (modern Mandadam, Guntur district) along with *laṅka* land of the reverine country situated in the Kaṇḍravāṭi of the Velanāḍu *viśaya* on the southern bank of the river Krishna<sup>17</sup>. Gaṇapatideva had already made it a gift by word of mouth to his guru (*Śrī Viśveśvara Śambhave Gaṇapati..... rrvāgdatta ....*)<sup>18</sup>. At this point, the word *laṅka* should be taken not of. It means a carpenter<sup>19</sup>. Then may the *laṅka* lands be supposed to have been apparently the carpenters' lands? The village of Velaṅgapuḍi on the river Krishna, another area of the Mattamayūrakas, along with Śrīrudradevīpura area (apparently styled after Rudradevī's name) went to Viśveśvara (*Śrīrudradevīpurah prādādgrāma Velaṅgapuḍi sahitam.....*)<sup>20</sup>. All these constituted Viśveśvara's landed property (*Velaṅgapuḍisahitam dattam Mandaranāmani*)<sup>21</sup>. Viśveśvara Śambhu got built up a temple of Śiva (named after his own name - *Viśveśvara*) and a monastery



called Śuddha - Śaivamaṭha<sup>22</sup> at the village of Mandaram. This he re-named Viśveśvara Golaki maṭha. To the word Śuddha - Śaiva we shall come back a little later. To come back to the organisation. Attached to the Śuddha - Śaiva maṭha there was a feeding house apparently meant for the Brahmins (*Viprasatra*). And within the Golaki - maṭha complex there were a maternity home and a hospital (*prasūty = ārogyaśālā*) also<sup>23</sup>. Provisions were made for clothing and feeding for the learners of Pāśupata philosophy (*Vidyārthinām Pāśupatavra tanām = api = annavastrādi*)<sup>24</sup>. Besides, Viśveśvara Śambhu is also said to have founded a monastery named Upala - maṭha at Kālīśvaram and granted to it the village of Ponnāgrāma by making it an *agrahāra*<sup>25</sup>. An *agrahāra* is essentially a rent - free landgrant to a religious establishment/to the Purohita community<sup>26</sup>.

At Eliśvarapura (modern Eliśvaram, Nālgonḍā district to the north-east of Śrī Śailam on the bank of the river Krishna) also Viśveśvara got constructed a maṭha and probably attached to it, settled 16 āvarakas (*Samatḥam ca ṣoḍaśā varakam*)<sup>27</sup>. Now, the word *āvara* means a stall and in this sense the word may be compared with *Āvāra* meaning collections to be made from the shops in a market<sup>28</sup>. If the word *āvaraka* is accepted in the sense of a stall, then it appears that there were 16 stalls near the maṭha at Eliśvarapura. And it is not difficult to understand that there grew some transactions at sale-purchase level at Eliśvarapura, which were apparently meant for the maṭha. However, Viśveśvara's disciple Gaṇapati granted the village of Kaṇḍrakōṭa in Pallināḍu (modern Palnadu

in the Guntur district) as the fee of his *guru* (*ācārya - dakṣiṇā*) for a feeding house and for water (*Gaṇapatiravāri Satra*)<sup>29</sup>. Gaṇapati made provisions for a feeding house and for water in his own name probably with a view to make his name memorable.

Viśveśvara Śambhu is known to have got established (Śiva) *liṅgas* at a number of places such, for example, as Mandrakuta, Chandravalli, Kommugrāma (modern Kommuru) and Uttara - Somaśila and granted the village of Punuru - grāma and forest portion (forest resources?) (*Dudyāla - grāmavanyāṁśam*)<sup>30</sup>. And it is not difficult to understand that such grants were made for maintaining the expenses of worshipping the *liṅgas*. At this point, attention may be given to the expression *liṅgam Vaiśveśvaram*<sup>31</sup>. Do we suppose that Viśveśvara set up the *liṅga* at Uttara-Somaśila by associating his own name with it?

So the Golaki - maṭha appears to have been a large religious establishment. And Viśveśvara Śambhu possessed the right to control over the whole of the establishment and over the temple and the village generally (*Devasya Satrasya maṭhasya tasyagrāmasya sarvasya ca sodhikārī*)<sup>32</sup>. The establishment was apparently supervised by an *ācārya* who received as remuneration one hundred *niṣkas* (*niṣkanām śatamācāryya bhogaṁ bhuñjita deśikah*)<sup>32a</sup>.

#### IV

Such a large establishment required a number of employees for its maintenance. There was a veteran physician who was concerned apparently with the *prasutiśālā*



and the *ārogyaśālā* attached to the *maṭha*; and to keep the accounts of probably these two departments there was also a veteran accountant (*Vaidya Kāyasthau dvau vicakṣaṇau*)<sup>33</sup>. Two Brahmin cooks (*pācakau dvau dvija...*)<sup>34</sup> were provided to discharge the duties at the feeding house attached to the *maṭha* (*maṭhasatra*)<sup>35</sup> which was, as said earlier, for the Brahmins (*Viprasatra*); and four male servants (*catvāraḥ paricārakāḥ*)<sup>36</sup> were employed for other duties supposed to have also included those concerned with cooking. Ten persons called Virabhadras were appointed to discharge security duties to the village (*Virabhadrasamākhyātādaśa - grāmasya - rakṣakāḥ*)<sup>37</sup>. The Virabhadras also performed certain other works such as the cutting of testicles, heads and stomachs (*bijaccheda Śiraccheda Kuṣicchedādi Karmmabhiḥ*)<sup>38</sup> which have been assumed to have been punishments by law<sup>39</sup>. In addition to the Virabhadras there were twenty employees who were apparently wrestlers and so could defend the establishment with their clenched hands and they might have been devotees (*bhaktā Viṃśati - Vvīramuṣṭayaḥ*)<sup>40</sup>. It is difficult to apparently accept the *vīramuṣṭis* as peons<sup>41</sup>. There were a number of artisans such as a goldsmith, a coppersmith, a blacksmith, a carpenter, a stone-mason, a maker of stone image, a basket-maker, a potter, a barber and an architect who may be supposed to have rendered their services to the *maṭha* (*Suvarṇṇa tāmrapāśāṇa Vainśāyāḥ - kumbhakār - akāḥ// etc. sthapati saṃyuttā Kāru - nāpita silpinah*)/<sup>42</sup>. There were a number of music professionals attached to the *maṭha* such, for example, as eight persons to play on musical instru-

ment of various types (*aṣṭamahalakavādakā*), six persons for beating drums and fourteen female singers (*gāyinyah = caturddaśa*) along with a male Kashmirian (*ekah Kāśmīradeśīyah*)<sup>43</sup>. To note the point that the male Kashmirian has been mentioned together with the fourteen female singers (*ekah Kāśmīradeśīyah gāyinyah = Caturddaśa*). This may lead one to assume the Kashmirian to have been the instructor in the music of the female singers, although his duties have not been specified in the Malkāpuram record.

However, one interesting point is that Śrīviśveśvara had ten dancing girls (*Śrīviśveśvaradevasya nartakyo - daśasamkhyayā*)<sup>44</sup>. The expression of course, may also offer the interpretation that the ten dancing girls (*devadāsī*) were dedicated to the deity Viśveśvara.

Viśveśvara Śambhu, the royal preceptor, settled some (number not known) Brāhmaṇas, versed in the *Sāmaveda* (c. 1000 B.C.), of his native village in 300 *putṭikās* of land near the *maṭha*. The word *putṭikā* has been considered a land measure equal to 8 acres presumably the area which can be sown with a *putṭi* of land<sup>45</sup>.

However, they looked after the income and expenditure of the *maṭha* and as remuneration enjoyed another 150 *putṭikās* of land. In case of death to any of these Brāhmaṇas, his wife could be taken in as an employee of the accounts department of the religious establishment. Thus the establishment appears to have been well organised one run by an efficient management.



The Golaki - *maṭha* had earned celebrity as a centre of formal education. Originally, it was a Śuddha - Śaiva *maṭha* as already referred to. Now according to the Pāśupata Sūtram<sup>46</sup> and the *Kurmma - Purāṇam*<sup>47</sup> (c. 8th - 13th centuries A.D.), the Pāśupata Śaiva religion had a Vaidika aspect. And Śrīkanṭh, a Śaiva philosopher of c. 12th Century A.D., is known to have established the doctrine of Śuddha Śaiva or Śivādvaitavāda which essentially emphasises that the realisation of the self is the realisation of Śiva. And the realisation of Śiva is nothing but a mental state in which the self becomes free from knots. And gradula meditation would lead one to the Brahman when he would become free.<sup>48</sup>

So the three Vedas such as *R̥gveda* (c. 1200 B.C.-1000 B.C.), *Sāmaveda* and *Yajurveda* (c. 1000 B.C. - 800 B.C.), logic, literature, and Āgama, particularly the Pāśupata *Vrata* were taught at the *maṭha* under study.<sup>49</sup>

The establishment satisfied not only the thirst for knowledge but also hunger and

thirst by providing food with all from the Brāhmaṇa to the Caṇḍāla (*ārabhya Vipra nanivāritānām caṇḍālaparyyantam = upagatānām anna pradānāya*)<sup>50</sup>. So, the social status of the establishment may be assumed to have been in tune with the saying - *bahujana hitāya ca bahujana sukhāya*.

The discussion may be drawn to an end with a few remarks. The Golaki *maṭha* of Mandaram was a recognised social institution which required royal support for protection as a centre of sacred place. And the Kākatīya royal court offered its support through patronage to the *maṭha* as a source of legitimation. Because the loyalty of local people was considered most important for building a political base. The large Golaki - *maṭha* in fact employed a number of persons in various capacities. Therefore the *maṭha* was something more than merely a sacred place of worship. It showed an integrated as well as organised behaviour-pattern which may orient its assessment more to socio-political perspectives than to mere religious functioning<sup>51</sup>.

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44. Pantulu J. R., *Ibid*, Second Side, p. 160, L. 52.
45. Sircar D. C., *IEG*, p. 268, cf. *EL*, Vol. IV, p. 357, Vol. XXVII, pp. 46-47.
46. Das Upendra Kumar, *Śāstramūlaka Bhāratīta Śaktisāadhanā*, Bengali, Vol. 1, Santiniketan, 1391, p. 234, fn. 11.
47. Tarkaratna P. (ed), *Kurmma - Purāṇam*, Bengali, Calcutta, 1395, *Slks* 1/14/48-49, 1/25/8-11.
48. Bhattacharyya N. N., *Bhāratīya Dharmera Itihāsa*, Bengali, Calcutta, 1384, p. 271.
49. Pantulu J. R., *JAHRs*, Second side, p. 160, Ls. 49-50.
50. Pantulu J. R., *Ibid*, Second Side, p. 160, Ls. 72-73.
51. Tapar R., *Cultural Transaction and Early India : Tradition and Patronage*, Delhi, 1994, p. 37 ff.



## ROCK PAINTINGS IN KAIMUR HILLS

Umesh Prasad

The evolution of mankind still remains a mystery. It is generally believed that *Homo erectus* (upright man) came into existence 1.5 million years ago and *Homo sapiens* (Thinking men) 50,000 years latter. It is also generally believed that early men were hunters and mainly depended for their food on animals & plants. Therefore they selected their dwellings on animal migratory routes. From study of several pre-history sites all over the world, one of the findings of the archaeologist is that these early men practised some sorts of decorative art in form of paintings and decorated their dwellings. The paintings done in pigment earth or ochre (fine clay & iron oxide) colour have been found almost all over the world including various parts of India as you know.

During our trekking expedition, the team has discovered existence of 25 rock shelters which are full of these stone age paintings. One can only imagine, how, these shelters would have looked, when all the paintings were clearly discernible. With passage of time and weather effects, majority of the paintings have got obliterated. But still, in some shelters paintings are reason-

ably in good condition. Majority of them are on the roof or inner side of the projection and therefore have survived. Another factor, which have helped their survival is that, most of these are deep in jungle and have become a den of wild animals.

From the study of paintings even a lay man can conclude that, these early men painted what they saw around them, what they practised or what they experienced. Therefore almost in all caves one can find paintings of animals, reptiles, the hunting scenes and the ethical or geometrical signs. The size of these shelters are large *i.e.*, some measuring almost 40 to 50 meters in length and 8 to 10 meters in height. These are either located on steep and perpendicular banks of rivers or rivulets or high on mountain tops.

There are some paintings which are very interesting, and these merit attention of the experts. These you will see in video clip-pings as and when they appear and some will be shown on slides.

- a) *Left Palm Impressions* : Impressions of left palm are almost in all the shelters. What merits attention is that in almost all the



impressions, two fingers are missing. A natural question arises, did our forefathers mutilate their hands by chopping off their fingers? This is a yet unanswered question, that has been suggested by observers of similar impressions available at Gargos cave in South West France. Gargos cave is known as "Cave of the hands", where there are 150 painted impression of hand some are black, some red and almost all of them have portions of two or more fingers missing. Most of them are of left hand rather than right. The colouring is mostly red ochre (pigment Earth). Archaeologists have dated this to be of 35,000 B.C. i.e., during the last part of the Ice age.

Existence of similar paintings in rock shelters in Kaimur Hills, raises another logical question i.e., if similarity exists between left palm impressions at Kaimur Hills and Gargos Cave in France, what was the commonality between the two, both situated thousand miles apart. This is a subject of research and an answer needs to be provided by the experts.

- b) *Painting of Mammal* : Yet another painting which is interesting is of a mammal. It has a long neck, small mouth, bulky body, thick leg and small tail. These are the characteristics of a dinosaur or its descendants. There is another photograph which is akin to this animal in walking posture. Kaimur Hills are considered older than the Himalayas. Was some creature such as painted existed in the region?

- c) *Painting of Whale* : In one of the caves there is a painting of a fish akin to a whale. Did rise of sea level 20,000 yrs. ago by 3 to 4 m had anything to do with this or similar fishes were once found in R. Karmanasa.
- d) *Painting of Women* : There is only one cave where paintings of women exists.
- e) *18 Feet Impression & Pot holes* : A chiseled impression of a foot on top of a projection of a Rock Shelter is not only interesting, but can throw some other aspects as well. The impression is 18" long and 1" deep. Human touch of chiseling is clearly visible. Some pot holes on rocks suggests that they were used as fire place. They are plenty.
- f) *Sun Worship* : One of the paintings, which depicts a tall man holding a chakra akin to Sun, with a string and men dancing around him is open to interpretation. This type of paintings have been found atleast in three shelters. As a lay man one can only say that this particular painting suggests worship of God, who could make day and night with his actions of hand in which he is holding the sun. If this assumption is true, a natural question arises, Was concept of God conceived/believed even in stone age or the sun worship originated and practised by early men in Kaimur Hill.

*Cheros Sati Stone* : Travels of Buchanan in Kaimur Hills states, His coming across a stone erected at Darauli Vill (near Bhagwanpur, Bhabhua) which be called the earliest traditions of cheros, and went on to



describe it as rare. He has referred this as Sati Stone. The stone had the sun and the moon engraved with a hand in between. The trekking team has come across two such stones in jungles near Budhua village and two of such stones at the entrance of Naugarh fort. The slides of this will be shown later. It is for the experts in the field to decide if Naugarh was originally a chero fort or was Francis Buchanan's interpretation correct?

*Stone Tools* : Some stone tools have been collected by the trekking team during our journey through the Kaimur Hills. At the end these will be shown to you for their authenticity.

### Conclusion

History is a record of the achievement of man. The history of our country, therefore begins with an account of the times when men first came into existence and started establishing settlements in this land. As history proper deals with facts, these can only be known if we have some records of some kind or other.

How and what role these stone age paintings play in determining chronology of pre-historical facets of our country. Till early 20th Century, or till discovery of civilisation in the Indus Valley the Western scholars had fixed our pre-historical time to 486 B.C. The revelation of Mohanjodaro and Harappan culture, forced them to refix, it to 5000 B.C. However some seals are yet to be deci-

phered. If scholars can not decipher the seals excavated it was not the fault of the people of Harappa and Mohanjodaro to have produced such language.

The study of pre-history in India only started in 1936, but it remained confined to stone tools and potteries found during excavations. In West, archaeologists have gone much beyond and discovered pre-historic cave dwellings in France, Spain and Africa which they have dated to early stone age and even earlier. In India only during post independence, archaeologists started working in this direction. In the Vindhyan Ranges, Dr. Wakanker discovered some cave dwellings with stone age paintings, which has pushed back our pre-history period to early stone age. Discovery of 25 rock shelter during trekking is a small effort in this direction. Kaimur Hills as you all know is the extension of Vindhyan Ranges. Discovery of twenty five rock shelters with stone age paintings has further proved that pre-historic men were not only confined to MP but also in entire Vindhyan Range and its extensions. Rock shelters and rock paintings have also been found in Nawada and Hazaribagh. Much more effort is required for further exploration and excavation. This will shatter the theory of Western scholars that early civilisation only sprang out from Mesopotamia, Egypt and Central Asia. It will also shatter the myth what "Holdich" had said "India had been from time immemorial peopled by immigrants".



# VAISNAVA THEMES IN PRE-MUGHAL PAINTINGS

Sipra Chakravarti

To a Vaisnava, god is not a detached spectator of the world process. He guides it actively, participates in it and motivates the orientation of devotees' mind. India has witnessed a continuing process of development of its one of the most popular religious faiths, the Vaisnavism. Being catholic enough assimilating the aspirations of popular masses this religion has inspired the plastic conceptions and pictorial delineations to a great extent. With a background of a large iconographic variations of this cult, the pre-Mughal mediaeval age witnessed a prolific activity of painted delights tinged with the spirit of Bhakti. The intellectual love for god accentuated by philosophic knowledge and religious feeling set aside the rigid conventionalism of the prevailing Indian paintings and infused soft and sublime beauty into both content and forms of this pictorial art.

By the time Vaisnavism had overflowed almost the entire country. Besides the Puranic compositions, doctrinal treatises, a considerable number of literary texts and lyrical kavyas of the Vaisnava faith emerged in the four corners of the country. As Dr. Khandalwala puts it — "As the themes of

love and devotion came to the forefront with the spread of Vaisnavism artists had to ensure a suitable means of expression which could combine fervent devotion of the Vaisnavas with a tender romantic appeal."<sup>(i)</sup> The religious forerunners of this period reoriented the early mannerisms introducing new doctrinal methods in conformity with the demands of the new society. The saints of the South at the outset, the Alvars, followed by the Acharyyas made Vaisnavism a popular religion designated in common parlance, *Śrī Vaiṣṇavism* abolishing all distinctions of caste, creed and social status. Alvars represented the emotional side of the Tamilian Vaisnavism while the Acharyyas stressed its philosophical side.

It could capture the imagination of the multitudes only during the time of Ramanuja who died in 1137 A.D., the greatest exponent of the *Viśiṣṭādvaita* philosophy or qualified monotheism. Vaisnavism became the nucleus for radiation of new spiritual knowledge. The philosophy of Nimbarka, a Tailanga Brahmana and a younger contemporary of Ramanuja and Vallabhacharyya (1479-1531) a Telugu Brahmana and a contemporary of Sri



Chaitanya both hailing from the South but preaching mostly in Northern India, added a new colour to the Vaisnava faith.

In North India, Ramananda (1400-1470) laid the foundation of a new school of Vaisnavism based on the gospel of single minded, uninterrupted and unalloyed devotion to god. In the West the Vaisnavism of the Maratha country found a fertile soil through the efforts of Namadeva (1400-1430 A.D.) a great devotee of Vithoba of Pandarpur.

The next champion of Vaisnavism who came to the scene to carry the holy gospel was Sankaradeva, (1449-1569 ?) an idealistic follower of Ramanuja. He put neo-Vaisnavism on a permanent footing in Assam. He was followed by Madhavadeva whom he converted to Vaisnavism from his Saiva faith.

In Bengal Vaisnavism assumed a tangible shape during the 12th century with the rule of the Senas who came from Karnataka. Possibly with them came Bhakti as a philosophical principle and as a way of life. The influence of Sri Vaisnava philosophy of the Acharyyas of Deccan was also discernible in the importance attached to the Goddess Lakshmi and Kamala in the Sena epigraphic records. In the meantime Jayadeva has composed his *Gita Govindam* whose appearance within a century of its composition gained acclaim wide popularity as far as Gujarat.

With the appearance of Sri Chaitanya in the religious world of the east a new turn in the faith known as Gaudiya Vaisnavism swept the country. Sri Chaitanya is said to have been inspired so much by the charm

and beauty of *Krishnakarnāmrita* compiled by Swami Bilvamangala, alias *Līlāśuka* (1250-1350), that he brought from his pilgrimage in Southern and Western India a copy of the text and introduced it to his followers. From his time this book became a veritable source for the religious inspiration of Bengal Vaisnavism. The theological concept of Chaitanya movement was elaborated by numerous works of the Goswamins Sanatana and Rupa. The Gaudiya Vaisnava movement got a new filip with the patronage of Prataparudra King of Puri (1497-1540) and Ramananda Ray, a bureaucrat turned religious propagator of Orissa. It is evident from the foregoing that Vaisnavism was playing an important role in shaping the religious atmosphere of the country in the late mediaeval years before the advent of the Mughals. There was a regular interaction between the intellectual minds of different parts of India. The theories and concepts added a new dimension in the graphical activities of the period which we are going to discuss now.

Let it be clearly stated that our range of study begins from 12th century when the days of *Mahākāvya*s and epics had gone and there was thus no scope for grandiose sculpture or wall paintings. The activities of miniature paintings were becoming a symptom of a culture as a property of the masses through the mediaeval linear idioms often accentuated by lyricism and supple nuances. We have chosen the terminating point of our discussion to a date of 1556 A.D. when the Mughal school of painting was establishing its fruitful existence with the beginning of Akbar's reign.



The Tibetan historian Taranath while writing about the painting activities of India in the mediaeval ages classified them as 'Ancient West' which flourished in a part of Rajasthan, the Eastern school flourishing in Magadha and Gauḍa and the Central school identified with the Buddhist school of Ajanta and Bagh.<sup>2</sup> Later scholars have described a section of Western group of paintings either as Gujarati or southern Rajasthani.<sup>3</sup> The art of this period was patronised by mostly the trading community in Gujarat, the Akhara or Sattra establishments of Assam and neo-Vaisnavites in Bengal.

#### Western India

The Mediaeval trends and tendencies brought about a profound change in the stylistic development of Indian paintings. This is evident in the cave paintings of Ellora which mark the transitional phase from the classical phase of plastic conception to angular linear treatment. From the view point of Vaisnava subject the Ellora murals representing Garuḍavahana Visnu flanked by two consorts Lakshmi and Bhudevi both carried by female eagles painted on the Western porch of the Kailashanath temple<sup>4</sup> and another colourful account of the Puranic legend of churning the ocean<sup>5</sup> at Ganesh Lena are probably the earliest Vaisnava theme of Western India of our period. The Vishnu and his consort illustration dates back to 8th-9th centuries A.D., while the Samudramanthana scene to 11th century A.D. The engraved figure of Garuḍa with pointed nose and farther eye, holding a snake in hand on the Vakpatiraja's copper plate dated A.D. 974 as

well as on a grant of Paramara Bhojadeva dated 1022 A.D. may prove to be the first dated evidences of incised drawing on metal in Western Indian art on any Vaisnava theme.<sup>6</sup>

Slightly later in Eastern India, discovered at Sundarvan, we have an illustration in the same characteristic features in the copper plate engraving of Dommanapala dateable to 1196 A.D. The Chittagong copper plate engraving visualising the Kamsavadha scene and dated in 1206 A.D. echoes the technical characteristics of the Sundarvan example.<sup>7</sup> The depiction of flying Vidyadharas on the ceiling of a Vishnu temple at Madanpur in Central India during the reign of Madanavarma (1130-1165 A.D.) represents the same trends of three quarter profile, projected eye, sharp nose etc. which closely resembles the Western Indian style.<sup>8</sup> It proves, therefore, that a special mediaeval art trend was almost overlapping in both Eastern, Western and Central India which later on became a universal quality of Western Indian painting.

If the early phase of Western Vaisnava paintings centres round Vishnu the next phase evolves round Krishna. Gujarat was the home of Krishna since he left Mathura and here flourished arose many Vaisnava religious centres. The Vaisnavite subjects became popular from about the 15th century onward which has been vividly represented in the illustrated manuscripts of the *Bhāgavata*, the *Gīta Govinda* and the *Bālagopālastuti*.

Forty miniatures in about thirty eight folios of an illustrated manuscript of



*Bālagopālastuti* by Bilvamangala now preserved in Museum of Fine Arts, Boston and another series with sixty five folios in the possession of Baroda Museum stand as landmark of the Vaisnava painting illustrations of the mid 15th century. Bilvamangala the author of famous *Kṛṣṇakarnāmrta* lived between A.D. 1250-1350. He was a disciple of famous Vaisnava Acharyya Madhva-charyya. His poems depicting passionate love and self-surrender to Krishna attained a great popularity within a hundred years of composition. *Bālagopālastuti* is primarily an anthology of verses bearing on the life of child Krishna. The five series of this manuscript illustration have so far come to light since the discovery of the first series in 1929. The manuscript is not dated but on stylistic grounds the pictorial illustrations are dated by the art historians in the middle of the 15th century A.D. The various series of *Bālagopālastuti* manuscript illustrations reveal a special delicacy and refinement of composition, replacement of yellow by gold in colour scheme, the costume designs exemplified by the elaborate weaving and embroidery of textiles, intricate jewelry, delineation of human faces with three quarter profile, long protruding eye, pointed nose, presence of abundant animal and birdlife, brick red background and simple colour scheme lend a special charm to this series of miniatures.<sup>9</sup>

We will now describe a few examples of *Bālagopālastuti* illustrations. The Boston Museum illustration shows Krishna as four-armed Vishnu, seated on a throne holding his attributes-mace, discus and conch, his vehicle the manbird Garuḍa kneels in front

of the throne. Behind Vishnu is a female flywhisk bearer. There are two honorific parasols, under one of which a male figure offering the god a garland. Norman Brown feels that the devotee is perhaps the author Bilvamangala himself. A peacock is seen perching on the top of a pillar.<sup>10</sup>

The next painting in two registers show at the upper right cows running in the direction of flute sound breaking open the teethers while at the bottom left is Krishna playing his flute and in the rest of the scene are gopis in various postures. This scene reminds one the incident at midnight when hearing the sound of Krishna's flute and longing for him the cows broke their bond and disregarding danger followed the music.

The paintings of the *Bālagopālastuti* third series represented here depict the expectant mother Devaki attended by a female. She is lying on a couch and a vegetational leaf is prominent between the two figures symbolising fertility.

In another painting Vasudeva is carrying the newly born Krishna to Gokul. The serpent god of the river is making a canopy to protect the child from rain and thunder-shower.

Another illustration depicts Krishna coaxed by Yasoda to take milk. Inside the room there are stylised milk carriers kept on the niche while outside bovine animals standing face to face. In the lower register of the painting Balarama is engaged playing hockey with the gopa boys. The two scenes are divided by the flowing Yamuna with floating fish.



The painting in the N.C. Mehta collection depicts five incidents compressed in one composition unfolding the *Rāmāyana* stories of the *Bālagopālastuti*. In the top panel to the left Rama is seated with an attendant behind and Sita in front with averted face gazing at the golden deer. Rama and Sita are engaged in the game of *chausar*. In the second Rama has shot down the golden deer. In the lower panel Sita is offering food to Ravana in the disguise of a mendicant and to the right the disconsolate Rama fallen on the ground is being consoled by his brother Lakshmana. The lower folio shows in the top register God Vishnu with Lakshmi and three female dancers one of whom is playing a long golden horn. In the lower panel are shown four female dancers and musicians.<sup>11</sup>

It is in the passionate songs of Jayadeva that we find for the first time a new trend in the growth of Vaisnavism. The lyrical drama singing the song celestial in praise of Lord Krishna composed by the poet who belonged to the court of Lakshmana Sena (1179-1205) describes Krishna's vernal sport in Vrindavan. Jayadeva probably died in 1129 A.D. within a century of his demise in 1291 A.D. a stone inscription recording the benedictory stanza of the text quoted as the invocatory verse in the inscription shows the quick popularity of the work as far as Western India. The inscription was issued by Maharaja Sarangadeva Baghela of Anahillapatam dated Vikrama year 1348 A.D. and now preserved in Baroda Museum. It begins with a salutation to Srikrishna with the verse from the *Gītagovinda*<sup>12</sup> The earliest illustrated manu-

script of this text restricted to 102 folios with a short commentary by king Mananka was executed in Gujarat in the 15th century of the Christian era. The manuscript is not dated but the pure Gujarati style of the extant miniatures of the 'Paper period' dates it to the middle of 15th century on stylistic grounds. The Vaisnava miniatures in the Gujarati *Gītagovinda* show some resemblance with the Jaina religious manuscript illustrations in the common style of expression of folk art. At the top of the miniatures are shown architectural settings, blue lines indicating the sky in conventional manner. The oval face with the pointed nose, the pinched cheek and the protruding eye are dominant features of these illustrations. This series however restricts itself to the Dasavatara theme.<sup>13</sup> Out of seven illustrations, the first is of four-armed goddesses Saradā seated cross legged holding book, *kamaṇḍalu*, *vīṇa* and a lotus stalk. The Matsyāvatāra is shown seated on a circular ornamented seat and a typical Gujarati lady standing by the side under a sort of a skyline putting on pointed black shoes. Both Matsyāvatāra and Kūrmāvatāra have been represented in anthropomorphic forms.

Next is the tortoise incarnation shown in two panels. In the upper section two ladies facing each other are offering something to the god. A pair of seven petalled lotuses probably rising out of the water are placed in a symmetrical way. The lower panel contains the Kachhapa avatāra seated on his forelegs on a pedestal in front of whom two ladies with the halo around the head are seen apparently with some offerings of worship.



The Varaha-avatara holding *khattvāṅga* and a *triśūla* in two hands and other two resting on the knee and bending towards the waist is seen seated crosslegged. On two sides of the god in the frontal area are two haloed male figures wearing crown and short beard. At a respectable distance, a lady is seen standing in front of the god.

The man lion incarnation of god comes next. Two of his upper hands hold a club and a lotus while the other two are engaged in tearing open the belly of the demon. The child Prahlāda is sitting by the side of Narasimha. There are three ladies in the painting two of them looking at the god in amazement, the other holding a jar.

The dwarf incarnation Vāmana is very elegantly drawn whose legs show great action and haste. The king Bali is shown standing before him with folded hands while the flying figure of a lady shows sign of reverence.

Next comes the figure of Paraśurāma seated royally under a gold canopy. The god holds a club, a *chakra* instead of *paraśu*, *triśūla* and gesticulates the *varadamudrā*. The two ladies on different planes carry some offerings as is usual in Gujarati paintings of this period. The empty space is filled up with creeper bearing flowers.

The tenth *skandha* of the *Bhāgavata Purāṇa* which describes the dalliance of Krishna with the *gopinīs* is represented by a manuscript in the collection of Brajabhusan lala Maharaja of Kankroli. The lone miniature in this manuscript portrays Krishna playing on flute flanked by a pair of gopis on either side. Absence of three

fourths eye projection beyond the facial outline leads the scholars to date this illustration to late 15th century A.D.<sup>14</sup>

From Mewar we can include two illustrations of Vaisnava theme describing exploits of Krishna. One of these represent bathing of the boy Krishna as described in the *Bhāgavata Purāṇa*. This is in an oblong format with *Devanāgarī* explanatory labels on the field of the picture. On the courtyard of a house Yaśodā is pouring water from a sprinkler and an attendant is making the hair of the child, while another gopi is looking at them placing a pitcher between her and the mother. This delightful page from a *Bhāgavata Purāṇa* is in the possession of Madhuri Desai collection otherwise betraying the known characteristic features from the Western classical style presents a slightly unsophisticated and angular version of it. This painting has been dated by Barret in about 1500 A.D. The inscription on the painting writes the names of gopi, Yasoda and the action of the figures as *Śrīkrishṇa devānhataḥ*. The figures are in strict profile and the eyes do not extend beyond the cheek.<sup>15</sup>

The *Gītagovinda* illustration of Krishna and gopis in the forest in the Prince of Wales Museum on account of seemingly Rajasthani semblance as well as Gujarati orientation of style can be dated between 1525-70 A.D. The curling cloud pattern, flowering creepers, semistylized trees and juxtaposition of bright colours express the pastoral mood where Radha with confidence look resignedly on at Krishna's dalliance at forest with her rival milkmaids.



Radha pining for the union with Krishna in a setting of stylised trees is another illustration of the same *Gītagovinda* manuscript. Here Jayadava's imagination gets free play in picturesque details, idyllic beauty and striking imageries.<sup>16</sup>

### North India

By the 15th century the Western Indian style had shown the sign of stiffening and hardening but a few progressive substyles were expressing the signs of significant and vigorous change. By the beginning of the 16th century a new style had come into being. One of these idioms still only dimly understood was certainly practised in North India around Delhi and Agra. One of the finest series of paintings of the new style depicts the life of Krishna, the ever popular blue god at once child, lover, hero and the teacher. The colour is bright, line bold and full of vigour. The *Bhāgavata Purāṇa* was painted in large numbers. According to an estimate the number of painted leaves have been as great as three hundred sixty three, around two hundred of these survived and dispersed among museums and private collections all over the world.

Two leaves from the *Bhāgavata Purāṇa* series showing distraught cowherd women searching in vain for the vanished Krishna; Krishna and Arjuna hunting animals suitable for sacrifice in Ehrenfeld collections;<sup>17</sup> Akrura taking Krishna and Balarama to Mathura in the Cleveland Museum of Art; abduction of Rukmini by Krishna in the J. Ribou collection of Paris; Krishna eluding the elephant demon Kuvalayapida; Brahma, Siva, Indra; and a herder and the cow ask-

ing the unseen Vishnu to manifest himself on earth; are some of the examples which can be dated between 1525-40. The coronation of Ugrasena from the same Purana in Paul F. Walker collection<sup>18</sup> and Nanda bidding farewell to Krishna in the National Museum belong to 1540 A.D.<sup>19</sup>

The discovery of all these illustrated Vaisnava manuscripts dateable to mid 16th century forms an important landmark in the history of Indian painting as it provides one more document testifying to the prevalence of common provincial tradition of miniature paintings in the pre-Mughal period.

### Eastern India

While the early phase of paintings in mediaeval Bengal is marked by Buddhist subjects, the later phase beginning from the 15th century is a new movement predominantly with Vaisnava theme. We do not have adequate materials of illustrated manuscripts or miniatures at this juncture but a few book cover illustrations demonstrate this element. The classical style of the Pala idiom now having been ousted, the mediaeval style reigns supreme. The trend of hitherto depiction of faces in full fronted view or in three quarter profile was abandoned giving place to full profile. Getting inspiration from neo-Vaisnavism accelerated by Sri Chaitanyadeva and his followers as well as from a host of literary works of the Vaisnava poets like Jayadeva, Vidyapati and Chandidasa the painters of this age took the Vaisnava motifs. The painted interiors of the binding boards of a commentary on the Prakrit prosody of Piṅgalatattvavyākhyā depict the Vaisnava content—on one of the



ten incarnations of Vishnu, on the other Krishna with gopis. The manuscript written in Maithili script is dated in Lakshmana Sena era 371 corresponding to 1491 A.D. This is now in the collection of British Library London. The book cover style is however linked to the early Rajput school of the 16th century.<sup>20</sup>

The Victoria and Albert Museum painted book covers of the *Vishnupurāṇa* originally found in Vishnupur in Bengal demonstrate nine of Vishnu's minor incarnations on one cover and the ten major ones on the other. The figures are mostly in dark or light brown against a red background and show angularity of outline with sharp pointed noses and chins.<sup>21</sup>

We have the privilege of bringing to the notice of the scholars a palm leaf manuscript of *Harivaṁśa* (Acc. No. M 14) dated probably in Lakshmana Sena era 398 corresponding to 1518 A.D. preserved in the Indian Museum. The two painted bookcovers of the manuscript illustrate flowers-red, yellow, dark red in one and three figures of Krishna, Rama and Balarama interspersed by flowers and foliage designs. In the colophon of the manuscript it is stated that one Shri Ramāpati, an inhabitant of Manchinigrama had prepared the copy of this *Harivaṁśa* on the tenth black moon day of *Bhādra* in the 398 year, probably of Lakshmana Sena era. (*Śhrī Mahābhārata satase(a)hasra saṁhitāyām vaiyāsikyāyām pārijāta Harivaṁśa aṣṭadaśa sāhasrikā samāpta. Śubhamastu svastirastu namo (lase ?) 389 bhādrābadi 10 vārau mañchinīgrāmaṁvastitena Śrīramāpaterlikhitam etad pustakam iti*).<sup>22</sup>

Indian Museum acquired a birch leaf manuscript of *Durgāpūjā-Paddhvati* in 1984 written in old Bengali script. One of the wooden covers show Devī Durgā as central figure within an arched compartment to her right the figures of Balarama, Rama and to her left Buddha. Kalki and Nrisimha. The illustration shows Nepalese idiom and we are inclined to date it in the 16th century although the script of the manuscript is of later date (Acc. No. ).

A pair of manuscript covers showing *goṣṭhalilā* and a lively *Kīrtan* scene with the ecstatic dance of Chaitanya in the centre betray a continuation of typical mediaeval Eastern Indian style. These covers were collected from Midnapore in Bengal and being contiguous with Orissa reflect artistic expressions tinged by the Orissan formula.<sup>23</sup>

In Assam Vaisnavism was propagated mainly through the teachings of Sankaradeva. He translated the 10th *skandha* of the *Bhāgavata*, a copy of which was illustrated in Śaka year 1461 corresponding to 1539 A.D.<sup>24</sup> though many art historians do not agree with the date of these paintings. Sankaradeva besides being a religious propagator is said to have been himself a painter. He has painted on *tulāpat* the scenes of Vaikuntha. It is said that he painted Krishna's life at Vrindavan on a piece of cloth with even captions of the paintings. From Namghar of Nahira village in Assam a painted manuscript book cover of *Stutigovinda* dated 1454 has also come to light which illustrates the deities like Vishnu, Devi and Brahma.<sup>25</sup>

The Vaisnava subject in Orissan paint-



ings began to make its imprints in the middle of the 12th century A.D. The Buddhist Vijaya by Ramanuja on a fresco painting on the west wall of Jagamohana and the depiction of Anantaśayna on the *bhogamaṇḍapa* both in the Jagannatha temple and Vaisnava paintings on the upper part of Jagamohana in the Kūrma temple at Srikakulam can be considered as the early phase of the Orissan Vaisnava paintings.<sup>26</sup>

The songs of the *Gītagovinda* with its rich imageries captivated the artists all over the country and Orissa was not an exception. The incised drawings on the palm leaf manuscript of the *Gītagovinda* representing Krishna waiting for Radha and in another depiction of Krishna and Radha, are perhaps the earliest manifestations in Orissa of the mediaeval linear style.<sup>27</sup> The manuscript is dated 1500 A.D. The 1550 A.D. illustration from the *Gītagovinda* manuscript depicting the gopis in search for Krishna amidst *kuñjavana* on the moonlit banks of the Yamuna in Nayagarh, Orissa is an excellent piece of fluid and graceful drawing.<sup>28</sup>

A pair of wooden bookcovers in the Asutosh Museum collection possibly associated with the *Bhāgavata Purāṇa* delineate the activities of Visnu *Gajendramoksha* scene and his *Trivikrama* form. The paintings are noteworthy for potent linear abstraction and formal technique.<sup>29</sup>

### Vaisnava painting in Nepal

Outside the geographical area of India, Nepal has faithfully preserved the Vaisnavite tradition as represented by its earlier paintings on manuscript illuminations beginning from the 11th century A.D.

The two covers of *Visnudharma Purāṇa* manuscript dated 1047 A.D. are the earliest surviving examples of Vaisnava illuminations. These paintings portray several interesting images of Vishnu with adoring females accompanied by the guardians of cardinal points. Only in three instances Vishnu's colour is dark and in others he is either light green or light yellow.<sup>30</sup>

Two illustrated covers of an unknown Vaisnava manuscript now in the British Museum represent ten conventional *avatāras* of Vishnu. The artist reveals an unusual inventiveness in the selection of subject matter and in the manner of delineation<sup>31</sup>. On another cover of a Saiva manuscript dated c. 12th century A.D. Brahma and Visnu adoring the Siva linga as well as guardians of the eight directions are represented in a somewhat different style.<sup>32</sup>

The wooden covers of *Śivadharmā Purāṇa* manuscript of the 13th century illustrates twelve emanatory forms of Visnu represented in *samapādasthānaka* posture.<sup>33</sup>

The Bharat Kala Bhavan *Devīmāhātmya* manuscript illustrating theme of Vishnu killing Madhu and Kaitabha beside a ocean exemplifies sinuous movement of the figural motifs. The delicate charm of the painting adds a new dimension to the composition. This manuscript has been dated to 14th century A.D.<sup>34</sup>

The Vaisnava painting of unusual interest from Nepal depicts a *Visnumaṇḍala* painted on cloth in year N.S. 540 i.e. 1420 A.D. The painting has been executed by Tejarama Somasarman (*idam paṭa likhitam*) who was himself the patron of this *paṭa* or



*paubā*. From the inscription it is also learnt that the painting was consecrated on the occasion of the performance of Vaisnava rite known as *anantavrata*. The *maṇḍala* represents the fourarmed Vishnu at the centre, Lakshmi to his right and the Garuda to his left. The central trio was surrounded by twelve couples each within a lotus petal.<sup>35</sup>

A syncristic *miśramūrti* of Vasudava and Kamala combined in one body is symbolical of assimilation between two sectarian thought of Vaisnavism. Painted in vivid colour combination with the delicate linear treatment Vasudeva Kamalajā *paṭa* is dated both in numerals and letter chronogram. Dr. Pratapaditya Pal has erroneously dated this painting as 1263 A.D. but judging by both stylistic ground and inscriptional evidence on the *paṭa* itself Dr. S. K. Chakravarti has

established the date of the painting as N.E. 686 that is 1566 A.D. This *paṭa* now belongs to Indian Museum collection.<sup>36</sup>

Another Visnu Kamala composite form from Nepal shows simplicity of decoration and style and may be dated earlier than the Indian Museum *paṭa*.

The foregoing survey of paintings of different regions in India and Nepal inspired by Vaishnavism leads us to conclude that the subject matter was exhaustively explored relying upon the literary and religious texts. However the painting of later phase *i.e.*, in the miniatures of the Mughal period, Pahari, Rajasthani and Deccani schools, the tradition continued both in contents and forms. The inner quality of Vaisnava milieu remained though a degeneration was noticed here and there.



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# HOW TO READ A THANKA VISUALISATION OF BUDDHIST ICONS

Kulavadhuta Satpurananda

Painting or sculpting itself, is a process of meditation in Mahayana, specifically in Tantrayana and Vajryana wings. Iconography is the science, the technical knowhow for a meditator to visualize his realisations for self-communication. While iconology, the science to read icons, renders the knowledge of realisation to others. Symbolism is the basic language of communication.

Symbolism in iconography has two different iconological interpretations - the spontaneous and the metaphoric. Spontaneous icons get revealed in the process of meditation and only another spontaneous realiser can recognise those through inner sight, though others would get meditative impulses, just by looking at those. The metaphoric icons are strictly based on principles they illustrate or stand for.

Now a days the communication between tantra practitioners and tantra academicians has become obscured. As a result, it has become immensely difficult for true researches to get correct interpretations. So I would like to discuss today some basic points of tantric Buddhist iconology in order to illuminate

some dark rooms of intellectual speculations. The basic symbols are common to both paintings and sculptures. I would discuss a few in special respect to Thangka painting.

Thangka painting has sadanga or six major rules

## I. COMPOSITION

## II. FORM

## III. DECORATIVE SYMBOLISM

## IV. COLOUR

## V. AESTHETICS

## VI. MEDITATION

### I. Composition

There are four major points in a thanka composition - the pyramidal, the circular, the rightist and the leftist. The pyramidal composition has two parts - the horizontal and the vertical. The horizontal forms of composition supports the central theme of the thanka, while the vertical compositions depict the central theme and the lineages. The flow of story goes in with the circular composition and is generally used in



depicting a story or a mandala. The rightist and the leftist thankas always depict the central form either in right or left side of the thanka. Rightist thankas depict the sutta, teaching of Compassion, and ascending order towards Nirvana in the peaceful Tantras (Dakshinachara). While the leftist thankas depict wrathful Tantras (Vamachara) leading towards Nirvana in Samsara or life, in descending order.

In composition at the top of the thanka there will be the

- (i) Rootguru
  - (ii) Buddha
  - (iii) Acharyas/Teachers
  - (iv) Ista or Ideal
- and in bottom —

- (i) Dakinis (ii) Guardian deities (iii) Protective Deities (iv) Offerings.

## II. Form

There are three basic postures of standing, sitting and dancing figures in a thanka—right, left and straight.

Leftists and rightist are the same as I have discussed before. In some figures the bodies are bent to the right or left and heads are bent just in opposites. Remember the left and right depend upon the flow of motor and sensory nerves known as Pingala and Ida, which flows from left leg to the right part of the body and again to the left lobe of the head crossing twice at the sexual plexus and third eye plexus. This flow of Pingala in the posture of the deity would mark the analytical principle (IQ) leading to

Compassion. While just the opposite is the flow of the Idanadi or the sensory nerve. Figures depicting that flow mark the principle of feeling (E.Q) leading to wisdom. These postures in variations are generally known as the avanga, lalita, ardhapanjanka, alida and pratyalida.

The straight figure either in standing, sitting or dancing postures depict the central neuro channel called Susumana-nadi leading to Mahamudra (SQ). Such figures depict the balanced nature between the left and right aspects of Tantra yoga. Straight postures in variation are generally known as samapada, kumbhapada, vajrasana, yashtmi etc.

The peaceful forms of the deities symbolize the principles in the way to Mahanirvana following the Bodhisattva path of sublime Compassion. They would have all-embracing broad chests rendering to heart doctrine and heads down chin marking Compassion. In case of wrathful deities they are generally dwarfish with large heads marking the head doctrine. They are generally up-chin signifying the wisdom aspects of the Bodhisattva.

Now the last but not the least are deity's trampling over other deities. There are innumerable wrong conceptions regarding them. Great many scholars have done blunder to some interpretations of these deities. Deities who are trampled over by principal deities, are personifications of the former stages of sadhana of yoga and tantras, not to get attached to or hold back to. Suppose Aparajita tramples over Ganesha straightly refers to the practices of



non-ego (chitvimarsha kala siddhi) ruling over all attainments depicted by Ganesha. Aparajita, hence, is the Attainmentless Attainment in practice. Same with Vajrajogini who signifies the Vajranai-nadi in the frontal lobe of the human head responsible for perfect kshanvannga realization *i.e.* perpetual changefulness of Nature. She tramples over Uma and Maheswara, the dual aspects of the Mother and Father Tantras, because she signifies the last states of tantra, the Niruttra. Similar aspect is found with Trailakyavijaya trampling over Uma Maheswara. Uma-Maheswara symbolizes the Mahayoga system at the Ajnachakra, while Trailakyavijaya by his name is the personification of transcending triloka or three worlds *viz.* Brahma-loka in the naval plexus (Manipura Chakra), Vishnu-loka in the heart centre (Anahata Chakra) and Maheswara-loka at the third-eye centre (Ajna Chakra), moving through the Amakala-Amabindu, Vimalakala-Vimalavindu and Nirvanakala-Nirvanavindu, the three sets of subtle most neurocentres in the front lobe responsible to merge the Alaya or Form-conciseness in Vilaya, the Void-consciousness in Atiyoga tradition. Trailakyavijaya is also found in the so called Hindu tantras in the name of Trailakyamohana and with the same description.

### III. Decorative Symbolism

The decorative symbolism can go with nature-symbols, pedestals, symbolic ornaments, weapons on the hands of the deities, and the offerings. In natural symbols

clouds depict dharma-megha or changing phases of understanding the dharma. Specific plants would signify specific aspects of life consciousness *e.g.* plantain plant signifies arts of life, papal tree as the attainment of Bodhi, kadamba tree, the passionless passion etc. The snow clad mountains peaks depict attainment while fountain is ecstasy and waterfalls as compassionate deeds. Pond is the symbol of objective mind, river of subjective mind and ocean as Selfsame ecstasy. Birds depict attainment of voidness, while animals stand for samsara principles *e.g.* black elephant stands for ego, white elephants for enlightenment, tigers for possessiveness, lions for expressions, bulls for perseverance and horses for dynamism, dragons for yogic impulses, monkey for restlessness, rabbit for timid mind etc. Various flowers stand for various impressions of unfurling mind and fruits for the fulfilled karmas. The sun and the moon are the left lobe and right lobe of the brain respectively. If the sun and the moon are found to occur at the sides or the bottom of the pedestals then the thanka represents the head doctrine while, when they are at the top, the thanka is of heart doctrine.

The symbolic pedestals are very important. They are generally four types of pedestals, — the lotus, the square, the triangular and the lion throne. These are depicted differently or together.

Lotus seat or padmasana is the symbol of Nirvana in its closing aspect while Samsara in its opening aspect. The half lotus seat depicts the ascending order or Nigama



principle in closing form, while the opening half lotus seat marks the Agama or the descending principle. If there is a double lotus seat, it should always depict the perfect Balance or Sunyata, the Voidness. The differentiation between a Manushi Buddha i.e. a historical Buddha and a Dhyani Buddha i.e. a Buddha principle can only be identified by the lotus seat, when the forms are exactly the same. Half lotus is always for a mortal Buddha while double lotus is the seat for a celestial Buddha. In a lotus seat a Buddha or a Bodhisattva gives the teaching of the mind.

Square seat or Vupurasana stands for the practices. The four sides or the square pedestal would signify i) Dharma the kriya practice, the discipline or rituals, purifying the body, (ii) Karma the yoga practice purifying the vital energy, (iii) Artha the Charya practice purifying intellect, (iv) Moksha the Niruttara practice or practice of meditations of pure mind. A Buddha or a Bodhisattva renders practice on a square pedestal.

Bhagasana or the triangular seat is the seat Matrix or Mahamndra teaching, the Tantric perfection.

The lion-throne or Simhasana is always the seat of a Samyak-Sambuddha or the Absolute Buddha. Generally the prophet i.e. Buddhas are found on lion-thrones. In case Tara is found on a lion throne, She should not be misinterpreted as a deity or a bodhisattva, but the Mother Wisdom of the Buddha-principle.

Sometimes Natha or Siddha tradition is marked with a symbol at the pedestal of a

Tantric deity, e.g. fish for Matsendranath, cow for Gorakshanath, pitcher for Kumaripa, shoes for Chamaripa, dice for Thaganapa, veena for veenapa, dancing girl for Leelapa, etc. Other animals as vahana or carriers of the deities are also symbolic, e.g. white lion as the carrier of Simhandada Lokeshwara or Vagishwara is the symbol of cosmic power or wisdom power or power of speech, the blue horse of the wrathful goddesses are symbol of dynamic trances, the white elephant carrying Bodhisattva Samantabhadra is the symbol of Self-realisation etc.

The most important of symbolical ornaments is the five-peaked crown. The five peaks are always symbols of the five Buddha meditations, which is the spine of Tantric Buddhist Iconography. Always the central peak of the crown would bear an effigy of a meditative Buddha or a jewel of specific colour of the particular Buddha to depict particular meditative lineage of the deity. The specific colour lineages I will discuss later. Kirtimukha or a demonic face with flowing creepers coming out of two sides of its mouth and held by two palms, is symbolic of specific attainment of the plexus where it is found to appear in a specific ornament, e.g. in a crown for the head-plexus, in a necklace for the throat plexus, in a pendant at the chest for the heart-plexus, in a naval belt for the naval-plexus, in the pelvic-girdle (kanchi) for the sexual-plexus. The Kirtimukha is the tamed demon of emotional success attained through yogic Chakra-veda meditation. Kundalas or earrings are symbol of perfection of hearing the Sutta and Tantra-



instructions. The crescent the sun and the urna or the spiral on the top knot of a deity is the symbol of perfect Mind, perfect Understanding and Voidness respectively. The jewel on the top knot of the Buddha is the symbol of Chitvimarshakala or the Matrix-plexus situated above the head measuring one-half of the nine parts of a body. Attainment of that plexus in a yogic meditation is attainment of Buddhahood.

A necklace of tiger nails adorned by a deity would characterise the deity as a childlike spontaneous one or Sahaja. Generally Manjushri the god of All Knowledge is found to be adorned with such a necklace. The garland of skulls or severed heads called mundamala is the symbol of fifty one alphabets of the basic mantrapractice.

The weapons in the hand of deities are symbolic of specific perfections of karma e.g. skull bowl for Atiyoga, the chopper blade for analytical dialectics, the sword for knowledge, the axe for uprooting attachments, hammer for memory, trident for yogic perfection, rope for Bodhisattva-vow or bondage of Compassion, the chains for inter-related process of meditations, the goad for ruling over the ego-elephant, the shield for self-resistance, the lotus for transcendental blossom, the conch for continuity of changefulness, snake for the Kundalini empowerment, the vajra or thunderbolt for Wisdom of Voidness, the bell for Compassion or Teaching, kilaya the mystic dagger for mantra-empowerment, skull-drum or dambaru for wrathful teaching, wheel or chakra for Dharma

instructions etc. The most important is the Vajra-Khattanga or pashupat. This has a trident head as symbol for the power to withstand physical, mental and intellectual tiredness caused in the way of Yogachara. This is followed chronologically by a skull representing Void, realization (Dharmapikaya), a wrathful or a peaceful deity's head for Universal realization (Sambhogakaya), a Buddha's head for personal realization (Nirmanakaya), a vase representing psycho-somatic practice and a cross-thunderbolt for clairvoyant mind. Sometimes, a flag or a banner of yogic victory is attached to it. If a deity or a guru holds the vajra-khattanga an iconologist should be sure that the figure is specifically Buddhist in origin and not an incorporated one. There is a 17th cent. Thangka of Ganesha, I collected from a old Sakyapa master painted in the menhrstyle, where, this instrument adorns Ganesha. To great astonishment, the thanka claims that Ganesha is a deity purely of Buddhist origin and not incorproated from Hindu Pantheon. A similar metal-relief Ganesha has also been found to adore the crest panel of Stuglakhang, the temple for Guru Padmasambhava where He is believed to have stayed in Lhasa (8th Cen.)

Sometimes a severed head of Brahma is found in the hand of a high wrathful deity e.g. Gughyasamaja, Sambara, Hevajra etc. Representing the deity as a principle beyond the vedic teaching and creation that which Brahma represents.

The offerings painted in a thanka are, mirror for vision, musical instruments for



sound, fruits for taste, incense for smell, scarf for touch, skull bowl of blood for female sexulaity, skull bowl of semen for male sexuality, skull bowl with brain for head doctrine, offering cakes for particular attainments in the process towards Nirvana, butter lamp for perpetual practice, vermilion for Compassion, medicine pot for saviour's vow, jewels for specific siddhis, Kusha grass for neuro-consciousness, grains for harvested realizations etc.

#### IV. Colour

The basic five colours represent the five basic principles of Tantrik Buddhism — (i) indigo for positive attainment of Voidness over negativity of inertia, (ii) red for Compassion ruling our passion, (iii) yellow for Perfection of Practice over competitiveness, (iv) white for All-knowledge over blankness of ignorance and (v) green for the carefree Spontaneity of Sahaja ruling over complexes of life.

The face of the deities are often painted gold to mark the Cosmic Consciousness. The double aureols at the back of deities are always symbolic of their specific meditation principles. The head aureole bear the colour of the particular perfection of meditation while the heart-aureole at the back ground is generally blue-black marking Nirvana. The mixed colours e.g. violet, maroon, mauve being red and blue in various proportions would signify the Togetherness of Voidness & Compassion or Tantrik Union (Yab-Yum). The weapons coloured in blue represent the techniques for attaining Nirvana.

#### V. Aesthetics

Aesthetics of painting a thanka would specifically depend upon the artist, the era and the tradition. There are thirteen different traditional styles of Buddhist paintings found all over Asia. There are both classical and folk elements in the styles. Generally the textual figures are in classical style while local deities are painted in specific folk styles.

#### VI. Meditation

When a thanka is painted with colours or visuals revealed through specific meditation, it can be interpreted by the mantras or dharinies at its back. The dharinies also mark the empowerment of the specific deity or mandala of any thanka. When thankas come up as revelations through the hands of a meditation master e.g. zen paintings, they really speak something into your mind while looking at them quite mindfully.

Without knowing these basic points, scholars who are never experienced in yogic-tantrik practices, would misinterpret the icons through mere intellectual speculations. Those create more contradictions in thought rather than clear ideas. Actually icons are made for clear understanding of difficult Sutta-Tantra principles. So iconologists should pay more attention in seeing icons rather than going through books only. Icons and books both have their own different languages to describe feelings and inculcate yogic and sutta teachings in the mind of the readers.



## THE AGE OF THE RAJHMAL TRAPS AND THE "GARO GAP"

R. N. P. Arogyaswamy

During my extensive field work, in the Geological Survey of India, I had the opportunity of examining not only the coal bearing areas, in the Rajhmals e.g. Chuperbita, Hura, etc., but also the areas covered at the Rajhmal Traps, in the Danini-ko area of Bihar lying to the north of the Santhal Parganas district of West Bengal. Later on I undertook the examination of the clay deposits associated with the upper Gondwana rocks, of the Rajhmals, right from near Bhagalpur to Tinpahar. All these deposits lie in close proximity to the railway line, known as the Sahibganj Loop of the then Eastern Railway. The basement rocks are not exposed in the greater part of the area traversed. However, highly kaolinised granitoid rocks are exposed in the vicinity of Mangal Hat, in close proximity to the spot where the east-flowing Ganga takes an abrupt turn southwards. This deposit has been worked by the Bengal potteries, Calcutta, for the production of high class China ware.

My examination of the Rajhmals, showed that the granitoid rocks, of Archaean age, forming the basement, are

overlain by the Lower Gondwanas, containing coal seams, followed by the deposition of the upper Gondwanas containing the ptylnphyllum flora and the beautiful flower known as Lonsdalia sp. These rocks had been assigned a Jurassic age, by Freismantel based on the assumption that these beds were inter trappean in nature. However, it is seen that these beds lack continuity, and are found only as boulders and fragmental slices within the traps. Further, the boulders show a high degree of vitrification, and resemble cherts, due to the baking caused by the intrusive traps. These trap rocks comprise the western scarp of the "Garo Gap".

Later I had the opportunity of undertaking the geotechnical examination of the proposed site for the upper kosi project, dam site, in Purnea district, Bihar, in the neighbourhood of Barakchitra not far from the Nepal boundary. My traverse took me right from Chatra in Purnea, upto the confluence of the three mighty streams the Sapta Kosi draining the eastern slopes of Mount Everest, the Arun flowing south from the heights of the Tibetan plateau, and the turbulent Tamar joining these two from the



east. This awe inspiring sight brought to my mind the Lepali saying "No man can ever control the Kosi".

The Kosi gorge is a magnificent sight and a treat for the geologist. One is fascinated by the inverted sequence of the rocks. The Tertiaries are overlain by the older Gondwanas and then by the gneisses. In addition, conglomerate beds, exposed on either side of the gorge, go to show the periodic uplift of the Himalayas.

My examination, showed that the Tista river had caved a deep trench controlled by the northern extension of the great thrust fault or its sympathetic branch, which caused the upthrow of the Garo Hills plateau which forms the eastern flank of the Gara Gap.

The rocks exposed in the northern part of the Garo Hills comprise gneisses. Significantly, there is a small exposure of the Lower Gondwanas, which was recorded by Dr. C.S. Fox. This goes to prove that the Gondwanas had a continuity, across the Garo Gap, right from the Rajhmals, across the Garo Gap, on the the Garo Hills and possibly beyond. However, the Garo Hills, forming the up throw side of the fault were subjected to intense weathering and erosion which resulted in the stripping of the overlying Rajhmal Traps and the upper Gondwana rocks.

The occurrence of the small patch of traps rocks, designated as the "Khasi Traps", in the vicinity of Lyrengu, south of Cherrapungi, at the southern edge of the Shillong plateau, becomes significant, in this context. These trap rocks overlie limestones

of upper Cretaceous age, containing *Nautilus danicus*. Hence, this occurrence of traps leads one to suspect that this is a probable remnant of the Rajhmal Traps which probably had a continuity across the Garo Gap, and that the Rajhmal Traps were also post Danian in age. This contention is supported by the fact the similar trap rocks are known to overlie beds containing *Cardita beaumonti*, in Beluchistan.

Further during my examination of the beach sands in the Karikal area I found fragments of visicular oceanic basalt washed a shore. Later the O.N.G.C. encountered similar rocks in the off shore drilling further south. These rocks also overlie the late Cretaceous. From the above mentioned facts it will appear that the Rajhmal Traps are probably an off shoot of the Deccan Basalts.

#### A Note on Trap Rocks

It is generally assumed that plateau basalts, such as the Deccan Traps, are quiescent flows. This assumption, however, does not seem to apply to the Deccan traps. Ash beds caused by explosive activity, have been reported from the Gujarat, and kutch areas. I had also examined, a clayey material which was associated with the alluvium of the Godaverri river, in the vicinity of Baud, near Humbi, Orissa. This material was collected by Dr. H. Crookshank and given to me for testing.

The material on elutriation yielded two fractions. One was a coarser fraction and the other was a fine clayey material. The petrological examination of the coarser fraction showed that it comprised shards of volcanic glass with the R.I. (refractive index) corre-



sponding to that of andisites. The Differential Thermal Analysis (D.T.A.) was carried out on the finer fraction as well as colouration tests, using special dyes. Both the above tests showed that this material had the composition of Montmorillonite which is the clay mineral derived from the decomposition of volcanic glass.

This raises the question

1. Where did the material come from?
2. Was it transported by water or wind?
3. What is the age of the explosive volcanism?
4. Is it related to the Deccan Traps?

My comments on the paper by professor Rames Chander, Roorkee University, entitled "Rupture Model of the Great Earthquake of 1897, North-East India. - Tectonophysics 204 (1992) pp 163-174) Elsevier Science Publishers, Amsterdam.

I had worked in Meghalaya, both in the Garo and the Khasi Hills. I feel that your concept, of the structure of the area, requires modification. My observations go to show that there is a very prominent thrust that is well displayed between Dalu and Bhagmara, at the foot of the Garo Hills. Here, the granitoid rocks are seen to rest on the Tertiary rocks, due to thrusting. This thrust is continued eastwards into the Dawki area and joins the Naga Thrust. At the eastern end, of the structure, oil shows are seen.

It will be seen that the shield rocks have been compressed two inter-related thrusts viz. the movement of the Indian plate northwards and the westward thrust arising

from the movement of the Arakans. As a consequence of the vice like grip the shield rocks yielded to a complex set of thrusts.

In order to explain what I have stated in the earlier paragraphs, I have drawn two hypothetical sections. I am also giving an explanation (1) Bhramputra valley in the Garo Gap., (2) Garo Hills Capped by the Tura Sandstones. (3) Bhramputra valley at the foot of the Himalayas. (4) The Himalayas.

In figure (2), Bhramputra valley adjoining the Garo Hills on the east (2) Garo Hills capped by the Tura sandstones (3) & (4) the shillong plateau with the granitoid rocks on the east and sediments on the west (5) Naga fault with overlying Barails etc which are disturbed. (6) The Arakan thrust.

It will be seen from the Sketch No. 1. that the movement of the Indian plate northwards, induced the uplift of the Himalayas and simultaneously a thrust, in the granitoid rocks of the basement, caused a slice of the granitoid rocks to be thrust over the younger Tertiary sediments.

This thrust caused the uplift of the Garo plateau capped by the Tura Sandstones. The eastern side of the scarp forms the eastern flank of the Garo Gap.

In the figure (2) it will be seen that the granitoid rocks are exposed on the northern side of the Garo Hills, right up to the banks of the Bhramputra in the vicinity of Dubri. Further the squeezing of the Meghalaya plateau by the northward movement of the Indian plate and the simultaneous eastern thrust of the Arakans gave rise



to a complex system of fractures. This included the thrust which pushed the granetoid rocks against the Garo Hills, together with the overlying sediments, giving rise to the Shillong plateau. Thus, the Dalu-Dawki thrust, trending E - W, at the southern scarp of the Garo Hills, under the influ-

ence of the Arakan movement, swerved northwards into the Barails and was continued into the area of the eastern syntaxis, in the Mishmi Hills. So also, the influence of the Arakan movement, the Naga thrust extended southwards into Mezoram and further south.



# BENGAL — FROM PRE-HISTORY TO HISTORY

Asok Dutta

The history of human culture is the history of continued change from one form to another through time and space. But in some regions, the rate of change is faster and in some other regions, the rate of change is marginal depending largely on the nature of interactions between his biological growth on the one hand and the natural environment on the other. In the total process environment plays a key role as Griffith Taylor (1953) has rightly pointed out that "Nature determines the route of development while man determines the rate and the stage". To understand the process of transformation of culture, one should have a thorough knowledge of the contemporary environment as well the forms and substances of the social and economic interactions. Because these forces are always at work to monitor the process.

Archaeological researches over the last three decades in this part of eastern India, leave no room to doubt that the genesis of urban growth in lower Bengal lies within the soil. Earlier, the reasons were ascribed to (a) Increased Indo-Roman trade and (b) Mauryan cultural expansion. But recent studies have shown that the genesis of early

historic growth in West Bengal lies in the preceding BRW culture which provided the much needed ground for social and economic transformation. The economic prosperity of this region was mainly due to increased overseas trade with south-east Asia. The basic aim of the present paper is to examine different issues contributing to the process of social and economic transformation of pre-historic culture into early urban culture and the impact of environment on culture growth. But before, we take up the major issues, it is, perhaps, better to have some idea about the geographical background of the area.

## Geographical Background :

West Bengal has a total geographical area of 8.87 million hector of land and a total population of over 52 million. Total agricultural land is 5.57 million hector which comprises 63% of the total land coverage of the state. Rainfall is moderate varying between 140 c.m. to 400 c.m. 21% of the total agricultural land is now covered under irrigation system. The fertility and productivity power are variable from region to region depending on the nature of soil formation and availability of irrigation facilities.



57% of the working population depends on agriculture for their livelihood and agriculture contributes 44% of the domestic products (Banerjee, 1978-79). Temperature goes upto 45 degree celsins and humidity varies between 80 to 100. The major drainage system of the state are Ajay-Damodar, Kasai, Rupnarayan, Ganga, Suvarnarekha, Teesta etc. Rice is the major crop of the state followed by wheat, potato, sugarcane, jute and other cereals and pulses etc.

The state of West Bengal is crowned with a host of panoramic landscapes ranging from lofty Himalayan mountain in the north to the weathered plateau of the west and recent to sub-recent alluvium plain of the east to the mighty Bay of Bengal of the south. But for the purpose of our present study, we shall confine ourselves to south-western part of the state.

The region laying between plateau fringe in the west to Bhagirathi/Hooghli in the east and Ganga/Padma in the north to Bay of Bengal in the south, is very important since it played the most vital role in the process of transformation and evolution of cultures in the state. Ghosh and Majumdar (1991) have identified three different morpho-stratigraphic units which are of fluvial origin. The units are :

#### A) Laterite upland

1. Primary laterite or lower-Lalgarh formation consisting of Boulder conglomerate which is thoroughly laterized. This formation occurs at a height of 90-120m. above the mean sea level and belongs to early to Middle Pleistocene age.

2. Reworked and redeposited materials of the primary laterite or secondary or detrital laterite or upper-Lalgarh formation belonging to Middle to late Pleistocene Period occurs at a height of 60m. above the mean sea level. The area covered by this land form is popularly known as Rarh area.
3. Alluvium upland developed over the eroded surface of Lalgarh formation has been identified as Sijua formation. This fluvial sediments comprising compact ferruginous brown sand and sandy loam occurs at a height of 38m. above MSL. This is popularly known as old alluvium sediments and belongs to late Pleistocene to early Holocene Period.
4. The younger alluvium sediments comprising greyish black to black fine sand, silt and clay of Middle Holocene period has been identified as Dhantikri or Panskura formation. This formation occurs at a height between 10-20m. above the MSL. This formation has been dated to  $4810 \pm 120$  B.P. by Radio carbon method (Chatterjee, Majumder & Chattopadhyay, 1988).

Besides, there are three more deltaic formations which occur at different altitude. These deltaic formations which occupy the mid basinal zone of West Bengal are younger in age than the fluvial formations of the west. The formations are :

- a) Dumdum surface or matured deltaic surface extends over Murshidhabad, Nadia and North 24-Parganas. It occurs at a height of 10-20 m. above MSL. It



belongs to Middle Holocene.

- b) Calcutta surface or intermediate deltaic plain developed at a height of 4-9m. above MSL. It occurs in Nadia, Burdwan, both 24-Parganas (North and South), Hooghly, Howrah and Midnapur.
- c) Lower most deltaic or Sundarban formation comprising greyish black sand, silt mud, and clay occurs at a height of less than 4m. above mean sea level. It extensively occurs in the low marshy land of Sundarban area. It has been dated to  $2900 \pm 40$  B.P. (Chakraborty, 1987).

The soil formations of these regions are different from each other effecting man-land relationship to a great extent which in turn influences the settlement pattern of the region.

### Prehistoric Background

The south-western part of the state popularly known as fringe area of the plateau was the most favourable ground to the early hominids in West Bengal. During remote past, the early hominids entered West Bengal from two directions with a definite culture known as Acheulian and concentrated in the fringe area. One such group moved from Mayurbhanj in Orissa while the other group moved from Singhbhum in Bihar. Both these groups shared a common culture with little amount of regional variation. These early hunter-gatherers continued to evolve both biologically and culturally through time and space in this region. A careful study of different industrial com-

ponents as well associated techniques of their cultures would reveal meaningful progressive changes through time. Initially the basic technology associated with their culture is known as flaking technology, but finally towards the terminal phase of the Pleistocene period, as new set of industries were introduced involving a new kind of resources utilization process. The technology is known as blade technique while the biological form associated with the new culture is known as *Homo sapiens sapiens*, the immediate ancestors of modern man. The technology was finally handed over to the post-Pleistocene and post-Palaeolithic hunter-gatherers through a natural process of evolution. This kind of transformation is documented at a number of sites in India. The post-Palaeolithic hunter-gatherers continued to live in the fringe area which was their best natural habitat. They were there not because it was a refuge area as suggested by Rao (1958), but because the area offered them their best habitat as well subsistence. In fact, they sustained their livelihood from a forest based ecology. The Mesolithic people were specialized hunter-gatherers and their techno-cultural level was much higher than their predecessors. Due to advancement in their technology as well more assured food, there was a sharp increase in the population density and consequently their settlement area was extended in red soil or lateritic belt of the western plain. In fact, the post-Palaeolithic Mesolithic hunter-gatherers of West Bengal were operating from two ecological settings — on the one hand, they had their forest ecology which provided them their best



habitat and subsistence and on the other hand, they had their social ecology in which they had to interact with the early farmers of the Neolithic culture or even with the higher Chalcolithic culture. This kind of symbiotic relationship existed in Bengal, at least from the second half of the second millenium B.C. The Mesolithic hunter-gatherers continued to maintain their existence through an interactive process of mutual exchange till they are displaced from their forest ecology in very recent years. The pattern of distribution of sites indicate this kind of close interactions between them.

Making an overview of the nature of distribution pattern of the BRW sites supported by limited number of radion carbon datings, one would not fail to notice that by about 1500 B.C., a group of people specialized in agricultural activities, domestication of animals and a fair knowledge of copper technology occupied the red soil or lateritic belt of Birbhum and Burdwan. Although agriculture was their main economy, but due to marginal productivity of the soil and minimum average annual rainfall, the people to a great extent depended much on hunting and pastoralism (Datta, 1991a) as evidenced by the discovery of huge quantity of animal remains belonging to both domesticated and wild varieties from the excavations at Bharatpur and Mahisdal. Moreover, the knowledge of copper technology was not upto the mark of expectation as it never happened a part in the production technology. The ceramic industries are naturally coarse, gritty and devoid of any sophistication suggesting the low rate of progress in their material culture. The BRW

people of this region were operating from different ecological bases, but this system of social and economic interactions did not work well. So despite huge amount of natural resources mainly in the form of copper and iron ores and higher density population, the economy as a whole remained marginal throughout. They could not sufficiently sustained their livelihood from agriculture cum hunting/pastoral economy. Consequently the settlement sites of this region were either ceased to exist in the half way or continued but ceased immediately before the historical period. Interestingly, during the same period of time, the Mesolithic hunter-gatherers of the region who were operating from two ecological bases continued to sustain their livelihood from their forest based economy. It appears therefore that within a specific geographical region, the system evolved by Mesolithic hunter/gatherer was very successful while the system evolved by the BRW people did not work for longer period of time. As a result a group of BRW people dispersed to further east in the old alluvium tract round 11th/12th C.B.C.

The BRW people, in course of their movement from west to east, finally settled in the old alluvium of Ajay-Damodar river valleys. It is during the stress and strain that the people acquired the knowledge of iron technology by about 1000 B.C. This region comprising compact brown sand and sandy loam with moderate rain fall and high productivity of the soil, offered the people their best habitat. The discovery of huge quantity of iron objects including nail, peg, rod, chisel, dagger, sword, points, disc, sickle etc.



not only indicate the involvement of the technology in the agricultural economy, but also suggest its role in other activity areas. Microliths are almost nil in this region while bone tool industry became highly sophisticated as indicated by the excavation at Pandurajardhibi. Of the animal bone remains found from excavation, the majority belong to domesticated stock. This suggests the marginal role of hunting in the total economy.

High productivity of the soil and a strong iron technology boosted the economy of the people leading to surplus production. This is evidently clear with the sophistication of the material culture as well introduction of new forms of arts and crafts. The settlement area was substantially enlarged as compared with the lateritic zone. The discovery of elaborate painting designs on pottery, large number of flesh rubbers, copper bangles and rings, flower vases and beakers, antimony rods, semiprecious stone beads etc. from excavations in this region tends to suggest that the people were approaching more towards a sedentary habits. This is reflected in higher density population and enlargement of settlement area. Pandurajardhibi, Mangalkot, Baneswardanga, Basantapur, Erur etc. are some of the classic sites of this region. The discovery of evidences of knowledge of mild steel from Pandurajardhibi and knowledge in alloying process from Mangalkot on the one hand and surplus production as indicated by the discovery of different arts and crafts on the other hand are very significant to understand the kind of interactions which were actually responsible for a

socio-economic change. In fact, the BRW people were operating from mainly two broad ecological bases. On the one hand, they had their agricultural ecology in which man-land relationship is very important and on the other hand, they had their semi-urban ecology in which they had to interact with a cross-section of people. This system under which the BRW people were operating in this region was very successful as a means of adaptation under certain conditions and limitations. But the system can not operate for a longer period of time with high density population. Because unless the surplus productions are linked up with economic growth, there will be no subsequent change in the material culture and that will happen only when the surplus productions find its way to the market. This kind of situation was not available in this zone. Consequently the settlement sites in this region, except one or two, show. The BRW people in their final stage of development encouraged such trade. Distribution of certain commodities like copper and iron objects as well stone beads found in all the three regions are identical in shape and form which tends to suggest some common production centres. Consequently the semi-urban economy of the BRW people of lower Bengal was upgraded to urban economy of the historical period. The BRW settlements of lower Bengal and few others of the old alluvium region were gradually transformed into urban centres. The excavation at Mangalkot has clearly demonstrated how the BRW culture merged into historical period through a transitional stage. The best evidence of this kind of social and economic



transformation is found in forms of the BRW ceramic industry in historical period.

### Conclusion

Making an overview of the above situation, it appears that the culture history process of West Bengal was very much influenced both by its geographical and environmental factors. The transformation and evolution of the Bengalee society from prehistoric to early historic stage happened in four different ecological zones, each being characterised by its own geographical and environmental identities. It is a history of de-

scending of man from higher to lowerland. A review of material shows that each region was suitable for a certain system in which the people were operating. For example, the hunter-gatherers found both the fringe and lateritic red soil areas suitable for operating under forest ecology. But in sharp contrast, the BRW people did not find the lateritic zone very suitable for operating under different ecological bases. Consequently due to over population, they had to disperse to other region. In the total process, environment plays the most vital role.

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# CONSERVATION OF PLANT RESOURCES IN INDIA : A REVIEW

Subir Ranjan Kundu

Conservation is the survival safe-guard towards wild-life and rational exploitation of nature and natural resources from further depletion. It is not an imaginary figure but a fact that over 28,000 hectares of tropical rainforests are being destroyed every day and as a result at least one species is disappearing daily in the process.<sup>1</sup>

The maiden aim and objective of wild-life conservation is nothing but to ensure secured existence of wild-life, facing threat. Till now naturalists and conservationists used frequently the term "wild-life" meant for animals. Sudden disappearance of animals make the way to adopt conservation strategy and fauna have got special attention of conservationists whereas conservation approaches towards flora are not taken seriously. In 1968, UNESCO convened International conference has taken a bold step through adopting IBP (International Biological Programme) towards saving of floral resources. In 1970, IUCN (International Union of Conservation of Nature and Natural Resources) assessed the status of endangered plant resources and their habitat and it leads taken into account the different con-

ventions on conservation time to time, viz. Wetland Convention, World Heritage Convention, Endangered Species Convention, Biodiversity Convention. There should be a combination of conservation strategies or conservation management to conserve the precious tropical plant resources<sup>2,3,4</sup>, particularly for the threatened and endemic species. To determine the conservation strategy for a particular species, depends upon several factors :

- i) Matrix of species
- ii) Distributional access
- iii) Ecological parameters
- iv) Economic potentiality
- v) Plant-animal relationship
- vi) Reproductive biology etc.

## CONSERVATION STRATEGIES :

Conservation strategies towards diminishing floristic elements depends upon—geographical matrix specificity, habitat diversity, adaptive radiation, ploidy level, viable population density, ecosystem stability, natural calamities, pollution, reduction of numbers of mobile links<sup>5</sup> etc.



What should be the criteria to adopt a conservation strategy between *in-situ* and *ex-situ* conservation strategy ?

To select any one strategy between *in-situ* and *ex-situ*, several factors are taken into account—

- a) Concentration of threatened taxa in a matrix.
- b) Concentration of individuals of a particular threatened taxon in a matrix.
- c) Concentration of common plants having economic potentiality.
- d) Concentration of wild germplasm in a matrix.
- e) Concentration of endemic plants in a matrix.
- f) Habit of endemic, threatened or wild germplasm taxa.
- g) Radial adaptation of the taxa concerned.
- h) Plant-animal relationship regarding "mobile links" and "keystone mutualists".
- i) Climatic, biological, edaphic and physiographic factors of concerned taxa.
- j) Sound M.V.P. (Minimal Viable Population) level required for unaffected reproduction biology of concerned taxa etc.

Generally, it has been found that abundance of threatened taxa in a particular matrix, make a matrix much sensitive and ultimately ideas to opt for *in-situ* conservation is evolved and executed if a matrix is enriched with huge number of individuals belonging a particular taxon or different taxa, either endemic or highly economic potential or low adaptive radiation.

The conservation measures are necessary to adopt for conservation of endemic and threatened plants not necessarily to be taken for common plants. Conservation strategies taken for floristic elements of mainland, can not be taken for island floristic elements. Likewise conservation management for terrestrial habitat definitely varied from aquatic habitat.

From practical view-point, adoption of conservation strategy is one thing but application of these strategies is quite different. Concentration of different endemic and threatened taxa or a greater number of single endemic economically potential taxon make some difference to adopt conservation strategies to some extent. In this critical decision making phase, conservationists have to exercise their right regarding feasible adoptive conservation measure — whether conservation of wild species to be performed on its habitat or taken out from its habitat and performed in any refugia.

#### IN-SITU and EX-SITU CONSERVATION STRATEGIES

ADVANTAGES and DISADVANTAGES : Finally, all conservation strategies come under two distinct categories. *viz.*

*In-situ* : It is a procedural aspect of conservation strategy exercised upon a group of taxa at its place of occurrence.

*Ex-situ* : Through this strategy a particular taxon or a group of taxa are conserved in two steps — collection of particular taxon or a group from natural habitat, followed by introduction of it in a plant refugia.



Normally, *in-situ* conservation strategy is favoured over *ex-situ* conservation strategy, where long-term conservation measure is taken. On the contrary, *ex-situ* conservation strategy is implied to those taxa which are not showing their presence in a good number in a particular matrix, easily transplanted from its place of occurrence to refugia, having high adaptive radiation, botanically curious, predominantly herb or shrub etc. According to conservation view-point, *in-situ* conservation is harmful to some extent rather than *ex-situ* conservation as the conserved taxa might be saved for sake of human interest, as life supporting species may not be exploited for a particular time being from its place of occurrence, conserved *in-situ*. On the other hand, from procedural view-point *ex-situ* conservation is more suitable than *in-situ*, through *ex-situ* conservation method germplasm of target species is collected from the field followed by introduction of it into refugia and nurtured with advanced scientific skills and technological back-up viz. tissue culture, seed technology, silviculture, cryopreservation and continuous vigil for each step. Practically, it has been found that lots of plants are not responding in tissue culture, not only that if the target taxon has low adaptive radiation and genetic rigidity, it will not survive in such micro-environment i.e. in the environment of that refugia. It has been found that *in-situ* conservation method is less expensive than *ex-situ* conservation procedure and ecologically more feasible. The maiden objective of conservation is not merely for sake of maintaining biodiversity or to maintain ecological balance but our

essential policy of insurance for further exploitation and investment towards different applied sectors — agriculture, horticulture, forestry, green medicine and *in-situ* conservation may ful-fill all purpose; as *ex-situ* conserved plants have less vigour, suffered from high rate of genetic erosion, low adaptive, less viable and unsuitable for exploitation in advanced applied sectors, mentioned here. A combination of *in-situ* and *ex-situ* conservation is required as critically endangered species have required an refugia where it can flourish and attain the level of M.V.P. and after attaining M.V.P. level those taxa may be introduced in its natural habitat where *in-situ* conservation management can provide its long-term stability. According to Nayar<sup>6</sup> 5% of our agricultural lands should be shifted from cultivated lands to matrix of wilderness genetic resources. The preliminary problems of *in-situ* conservation may be offset through creation of a buffer zone around the centre of *in-situ* conserved matrix or core zone to insulate the matrix of today or matrix of tomorrow, suffering from developmental pressure.

### Conservation of Floristic Elements in India :

PRELIMINARY EFFORTS : Conservation of wild flora and their habitats have now become an important global issue. Though conservation ethics of India is prehistoric but scientific approach is started in nineteenth century and which has got momentum in twentieth century. Through exercising Indian wild-life (protection) Act 1972<sup>7</sup>, vast areas of the country were taken



under concerned matrix, in form of National parks, Reserve forests, Sanctuaries etc. In 1979, advisory group of Indian National MAB committee recommended the potential areas as Biosphere Reserves<sup>8</sup>, one of the most important approach towards effective conservation measure. The conservation approaches through National parks, Sanctuaries and Reserve forests are very much simplistic—to conserve species and their habitats, mainly habitat-specific conservation measure. Another line of conservation process is usually adopted, which is species-specific. e.g. Tiger reserves, Crocodile sanctuaries, Citrus sanctuaries, Orchid sanctuaries etc. But species-specific conservation measure can not be exercised for all threatened, endemic and economically potential taxa as species diversity of a tropical eco-floristic region is to some extent high. The floristic diversity of India is presented in Table-1.

Table-1  
FLORISTIC DIVERSITY OF INDIA

Plant Diversity	Number of Species	Percentage
Bacteria	850	0.67
Algae	2500	2.00
Fungi	23000	18.23
Lichen	1600	1.30
Bryophyta	2700	2.14
Pteridophyta	1022	0.80
Gymnosperms	64	0.05
Angiosperms	17000	13.50

Hence a third line of conservation strategy is evolved which ensures survival of biota of any particular matrix, specially

threatened taxa, is ensured in Biosphere Reserves<sup>9</sup>. Conservation through Biosphere Reserves is total approach as it ensures ecological balance and gives a pristine nature where whole biotic community can co-exist and proliferate altogether. This strategy has helped to maintain principle of biodiversity in one hand and has ensured to keep the matrix alive on the other hand as it is essential for further exploitation of all species of living organisms, marvellous chemical factories, each unique and each of great potential value<sup>10</sup>.

#### Categories of Matrices under *in-situ* and *ex-situ* conservation :

- i) NATIONAL PARKS : An area dedicated by status (Legislation) for all times to come, to conserve the natural or historical objects of national significance and to conserve wildlife therein, in such a manner, and by such means, as will leave them unimpaired for such modifications, as local conditions may demand. Since a National park is created by Central legislation, it has a permanent status<sup>11,12</sup>.
- ii) WILD-LIFE SANCTUARIES : Place, where some rare, wild, indigenous any form of wildlife is found in good numbers and usually represents a region are considered to be in need of protection together with the natural environment, the area is declared as a wildlife sanctuary. It is created by the State Forest Dept. by Gazette notification. It can therefore, be abolished in a similar manner<sup>12</sup>.



- iii) **RESERVE FORESTS** : The State legislative authority may by notification declare an area as reserve forest. Normally, no hunting of any wild animal has been permitted in such reserve forest area except under and in accordance with a licence issued by the chief wildlife warden or the authorised officer<sup>7</sup>.
- iv) **WORLD HERITAGE SITES** : The area is on the World Heritage in Danger list, include the areas of outstanding universal value, which is preventing the major stages of the earth's evolutionary history, geological process, biological evolution and man's interaction with his natural environment. The World Heritage Sites must have exceptional natural beauty, may be natural habitat, may be ancient, man-made architectural site<sup>7</sup>.
- v) **BIOSPHERE RESERVES** : Protection of plants, animals and micro-organisms in their habitat is practised in Biosphere Reserves. It is a total conservation approach of biota of a region to maintain ecological balance. Each Biosphere reserve is consist of Core zone, Manipulation zone or Buffer zone and Reclamation zone or Restoration zone<sup>13, 14, 15</sup>.
- vi) **RAMSAR SITES** : The Wetlands of International significance, (dwelling place of waterfowl) in terms of ecology, botany, zoology, limnology or hydrology under protection, are designated Ramsar Sites<sup>16, 17</sup>.
- vii) **SACRED GROVES** : The sacred groves are tracts of forests which have been

completely immune from human interference on grounds of religious beliefs. These sacred groves are rich abodes of wildlife and often serving as last refuge of threatened animals and plants<sup>18</sup>.

- viii) **MARINE ECOSYSTEMS**: The areas under marine ecosystems are very much sensitive to pollution. Hence special care has been taken to conserve wildlife of marine ecosystem through converting these areas to marine parks<sup>19, 20</sup>.
- ix) **MANGROVES**: Mangroves, the salt tolerant forest ecosystems are rich reservoir of salt tolerant forest animals and plants. Efforts have been taken to conserve Mangrove ecosystems to save mangrove dependent wildlife<sup>21, 17, 22</sup>.
- x) **CORAL REEFS**: The Coral Reefs are shallow-water tropical marine ecosystem (formed by a calcareous skeleton of marine invertebrate belonging to phylum Coelenterate), a rich abode of faunal and floral diversity. Reefs are of three types—Fringing, Barrier, Atoll. Conservation management has been adopted to maintain stability of reef ecosystem (which is affected due to commercial exploitation of coral)<sup>17, 23, 24</sup>.

Besides these main ten categories there are several kinds of conserved matrices under *in-situ* conservation. viz. Gene reserves, Ethno sanctuaries etc. e.g. Orchid sanctuaries, Citrus sanctuaries.

Different categories of protected matrices under *ex-situ* conservation are follows :

- i) **BOTANIC GARDENS** : These are areas, where plants are introduced, collected



from far and wide, nurtured attain to maturity, multiplied and for further scientific studies and re-introduction in its natural habitat. The botanic gardens are resorts of common as well as threatened plants<sup>25</sup>.

- ii) PARKS : The areas either natural or man-made, embraced with ornamental plants and few animals which must have aesthetic appeal<sup>26</sup>.
- iii) AQUARIA : The man-made water reservoir, where aquatic animals and plants are conserved for recreational purpose and scientific studies<sup>27</sup>.
- iv) BIO-BANKS : The living organism and any parts of it are conserved here to regenerate and multiplied a number of plants and lower group of animals further.

#### Participating Agencies in Ecofloristic Conservation movement in India :

In India, different Governmental and non-Governmental agencies are involved in conservation of floristic elements. Some of the leading Institutions are—

Botanical Survey of India

Forest Research Institute

G.B. Pant Institute of Himalayan Environment & Development

Arid Forest Research Institute

Tropical Forest Research Institute

National Bureau of Plant Genetic Resources

Institute of Wood Science & Technology

Institute of Forest Genetics & Tree Breeding

Institute of Microbial Technology

Institute of Forestry & Human Research Development

Indian Institute of Forest Management

Regional Plant Resource Centre

M.S. Swaminathan Research Foundation

Indira Gandhi Conservation Monitoring Centre, W.W.F.

Bombay Natural History

Regional Research Laboratory

National Institute of Oceanography

Different N.G.Os, different Universities, about 3500 Eco-Clubs are also involved in plant conservation.

#### Legislative measure of Plant Conservation in India :

A number of legislations<sup>8,27,23</sup> are enacted for conservation of floristic elements are as follows :

- a) Indian Forest Act 1878.
- b) Indian Wildlife (Protection) Act 1972.
- c) The Water (Prevention and Control of Pollution) Act 1974.
- d) The Forest Conservation Act, 1980 (amendment, 1988).
- e) The Air (pollution and Control) Act, 1981.
- f) The Environment (Protection) Act, 1986.
- g) The Territorial waters, continental shelf, Exclusive Economic Zone and other Maritime Zone Act, 1976.



- h) Arunachal Pradesh Forest Reserve (Constitution and Maintenance) Act, 1975.
- i) Arunachal Pradesh Forest (Removal of Timbers) Regulation Act, 1983.
- j) Karnataka Forest Rules, 1969.
- k) Kerala Forest Act, 1961.
- l) Meghalaya Forest (Removal of Timber) Regulation Act, 1981.
- m) Nagaland Forest Act, 1968.
- n) Orissa Forest Act, 1972.
- o) Punjab Forest (Sale of Timber) Act, 1913.
- p) Rajasthan Forest Act, 1953.
- q) U.P. Protection of Trees in rural and hill areas Act, 1976.
- r) Indian Forest (West Bengal Amendment) Act, 1988.
- s) The National Environmental Tribunal Act, 1995.
- t) National Environment Appellate Authority Ordinance, 1997 under the Environment (Protection) Act, 1986.

Through enacting Indian Wild-life (protection) Act, 1972, vast areas of the country are brought under conserved matrices in form of National parks, Reserve forests, Sanctuaries etc. Theophrastus (370BC-285 BC)<sup>28</sup> in his "Enquiry into plants" noticed habitat—specificity of aquatic plants but his observation has not taken seriously by conservationists at that time. But present scenario of drastic encroachment of wetland, allied with great loss of wetland resources

raise a concern to conserve this fragile ecosystem. In 1971, the Ramsar Convention passed a resolution to conserve this waterfowl habitat as well as wetland with its underexploited resources. The seven important wetlands of India are brought under Ramsar Sites Directory of world. In 1979, advisory group of Indian National MAB Committee has recommended the potential areas as biosphere reserves, one of the feasible approach towards effective conservation measure. The conservation approaches of National Parks, Sanctuaries and Reserve forests are very much simplistic — to conserve species and their habitats. But the conservation approaches of Biosphere Reserves are to some extent complex one and it is a total approach of conservation through which whole biotic community of a region can proliferate in a pristine nature. Another line of parallel conservation movement has been initiated in 1982, IUCN-CNPPA (International Union of Conservation of Nature and Natural Resources — Commission of National Parks and Protected Areas) compiled and categorised the list of protected areas throughout the world with help of UNEP, UNESCO and WWF. The three categories of conserved matrix types and which are subsequently categorised under ten groups are proposed by IUCN-CNPPA<sup>29</sup>.

Gr. A — Areas of particular interest to CNPPA: There are several subgroups for which CNPPA takes responsibility to monitor the status, to provide technical advice as requested. These includes—

#### I. Scientific Reserves/Provincial Strict Nature Reserves



- II. National parks/Provincial Parks
- III. Natural Monuments/Natural Landmarks
- IV. Nature Conservation Reserves/Managed Nature Reserves/Wildlife Sancturaries
- V. Protected Landscapes

Gr. B—Areas of interest to IUCN in general : These categories are of particular importance to IUCN as a whole and are generally found in most nations, but would not be considered exclusively within the scope of CNPPA; however, CNPPA may wish to monitor and prove expertise on these areas which are of particular importance to nature conservation. These include—

- VI. Resource Reserves
- VII. Anthropological Reserves/Natural Biotic Areas
- VIII. Multiple Use Management Areas/Managed Resource Areas

Gr. C—Internationally recognised/Affiliated designations : These categories form part of international programmes and have specific relevance for nature conservation. Yet may, in many cases, already receive protection under a previous category, CNPPA may be called upon to monitor these categories and to provide special attention in co-operation with other institutions with which IUCN has consultative status. These includes —

- IX. Biosphere Reserves
- X. World Heritage Sites (Natural).  
Procedural aspect of conservation strat-

egy of IUCN-CNPPA (1982) is unique, however, this approach is reviewed shortly and another comprehensive model has been presented by IUCN in 1984. An outline of IUCN (1984) led classification of protected areas is presented below<sup>7</sup>. —

Category-I : Scientific Reserve/Strict Nature Reserve — which maintain natural process in an undisturbed state in order to have ecologically representative examples of the natural environment, available for scientific study and for maintenance of genetic resources in a dynamic and evolutionary state.

Category-II : National park — Where natural and scenic areas of national or inter-national significance are to be protected for scientific, educational and recreational use.

Category-III : Natural Monument/Natural Landmark—Where nationally significant natural features are protected and preserved because of their special interest or unique features.

Category-IV: Managed Nature Reserves/Wildlife Sanctuary—Where natural conditions, necessary to protect nationally significant species, groups of species, biotic communities or physical features of environment are assured, where these require specific human manipulation for their perpetuation.

Category-V: Protected Landscape or Seascape — Where nationally significant natural landscapes are maintained, which are characteristic of the harmonious interaction



of man and land while providing opportunities for public enjoyment through recreation and tourism within the normal life-style and economic activity of these areas.

Category-VI: Resource Reserves — Where open options, management flexibility, multiple use for further exploitation of wildlife, genetic resources, timber, forage etc. are maintained.

Category-VII: Anthropological Reserve/Natural Biotic Area — Where genetic resources are conserved through maintaining sample ecosystem in natural state and ecological diversity is maintained along with protection of sites and objects of cultural, historical or archaeological heritage.

Category-VIII: Multiple Use Management Area/Managed Resource Area— Where open options, management flexibility, multiple use-like exploitation of wildlife, timber, forage or extractive commodities are maintained alongwith recreation and tourism necessary for rural development.

The conservation approach through Biosphere Reserve has yield another concept—the concept of Biodiversity. In 1992, the representatives of ca. 181 countries meet together at UNCED convened Earth Summit in Rio-de-janeiro, Brazil to upheld the principle of biodiversity (*i.e.* species, eco, gene

diversity) globally; as a result the national wildlife conservation approach has been lifted from national strategy to global agenda. Rio-convention has not stuck only the existing problem on conservation but also has laid-down the future strategies in form of Agenda-21 — a guideline of conservation strategies for 21st century. The national conservation strategy and policy statement for environment and sustainable development (1992) gives an outline of policy actions required to give greater attention to conserve biological diversity. The National Wild life Action Plan (1993) sets out the priority areas of wild-life conservation. The CRZ(Coastal Regulation Zone) notification in 1991 has empowered central/state/union territories to prepare coastal zone management plan (CZMP) for conserving coastal biological resources. In 1996, to strengthen CZMP, another associated supplementary concept is raised experimentally viz. No Development Zone through declaration of a zone arround a potential hazardous industry of coastal area to maintain ecological balance and procedural safeguard from pollution. An account of *in-situ* conservation oriented activities from 1977 onwards is presented in Table - 3, and an account of matrices under *ex-situ* conservation is given in Table-4.



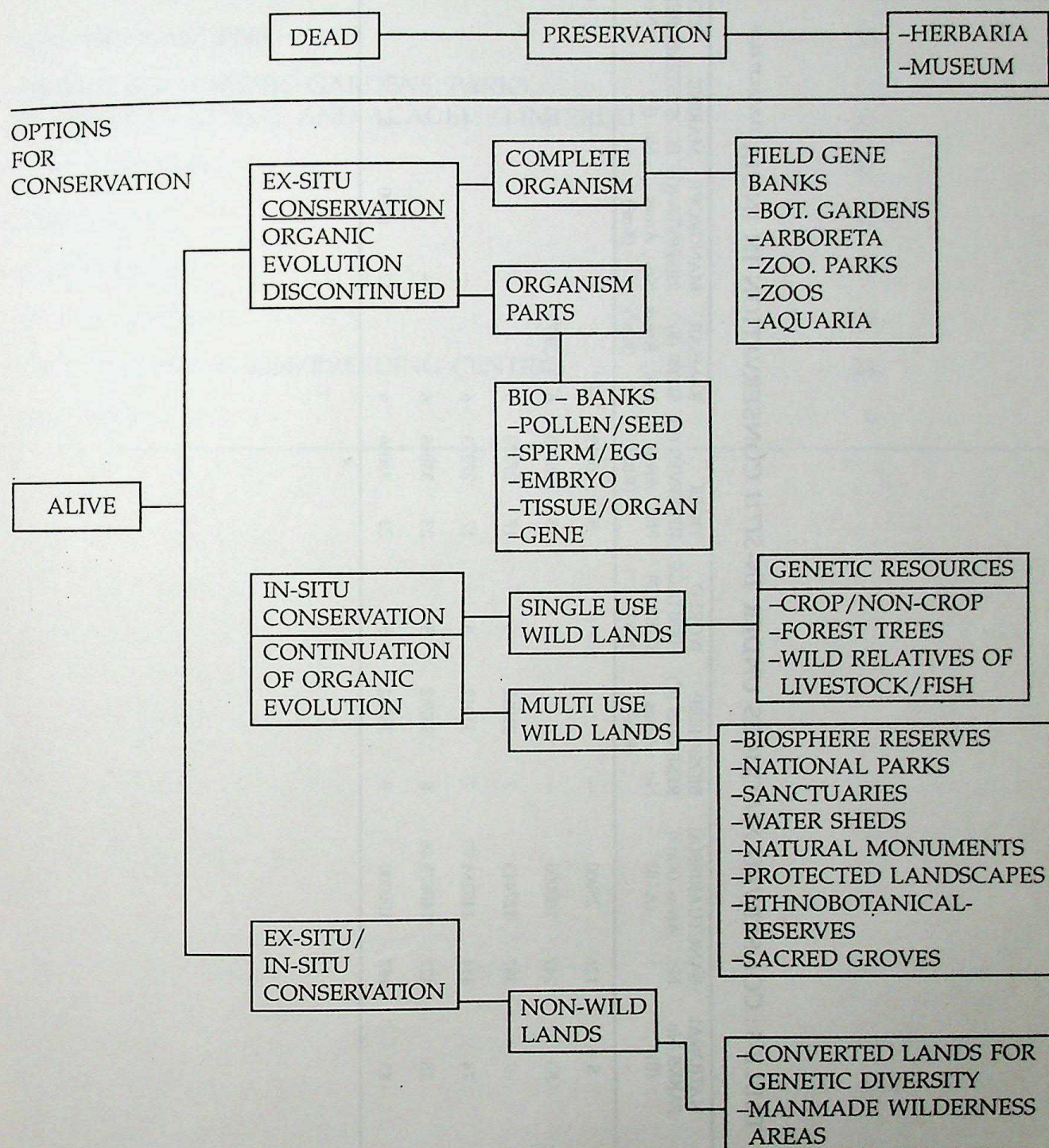
TABLE-2 : PLANT CONSERVATION STRATEGIES IN INDIA<sup>31</sup>



TABLE-3: CONSERVED MATRICES UNDER IN-SITU CONSERVATION IN INDIA 33,7,8,32,17,22,23.

YEAR	NATIONAL PARKS No (B)	SANCTUARIES(A) No. Areas (Km <sup>2</sup> ) (A+B)	BIOSPHERE RESERVES (C) No. Areas (Km <sup>2</sup> )	WORLD HERITAGE SITES (D) (No.)	TIGER RESERVES (E) No. Areas (Km <sup>2</sup> )	RAMSAR SITES (F) No. Areas (Km <sup>2</sup> )	MANGROVE RESERVES (G) No. Areas (Km <sup>2</sup> )	MARINE ECOSYSTEMS No. (H)	CORAL REEFS (I) No.
1977	5	126	25000	—	9	16619	—	—	—
1985	53	247	100000	5	15	26693	6	1929.73	—
1989	67	397	127443	5	17	27373	6	—	—
1991-92	74	414	140284.93	5	17	27373	6	—	—
1994	75	421	140675.46	5	23	33046	6	—	—
1996-97	83	447	150000	5	23	33046	6	12	6700
								5	4



TABLE-4 : MATRICES UNDER *EX-SITU* CONSERVATION IN INDIA.<sup>26,27,23</sup>

CATEGORIES	NUMBERS
BOTANIC GARDENS	33
UNIVERSITY BOTANIC GARDENS, PARKS, GARDENS OF PUBLIC AND ACADEMIC INTEREST	35
ZOO GARDENS	107
DEER PARKS	49
SAFARI PARKS	13
SNAKE PARKS	6
NATURE/EDUCATION/BREEDING CENTRES	24
AQUARIA	6



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# ETHNOBOTANY IN PERSPECTIVE OF MUSEUM

D. C. Pal

## Introduction

Museum is not only the house for preservation of materials but also it is an aid for promoting scientific research, popularisation of scientific achievements and awakening interest among common people, children, students and inquisitive scientists. Museum is defined as a centre for research, education and exhibition. Once it was considered as the house for preservation of the subjects of art, history along with curios and as the house for protection of them from destruction. But in recent recent museum studies, the science i.e., systematic approach towards wide range in the technology for presentation of physical, social, environment medical, archaeological, anthropological and life sciences have got greater importance. With the advancement of science and education systems, museum have become very much essential for placing each and every subjects in the museums. In this context, the new branch of science—"The Ethnobotany" should be a primary item of exhibition in a museum for bearing the total plant heritage of the tribal communities.

Practically there is no publication to deal with the Ethnobotanical perspectives in a

museum. Of course, some topics namely Herbarium method (Jain & Rao, 1976), Manual of Ethnobotany (Jain-1987) etc. are published. They are not the direct Ethnobotanical museum technology but an indirect aids to it. So the subject Ethnobotany in a museum may be selective one and the selection of topics and their exposition should be in a scientific manner.

## Mode of arrangement of Ethnobotanical topics in a Museum :

- i) The display of topics should be from common known materials to unknown materials.
- ii) The materials should be kept in its natural effects.
- iii) Less labels and more visual of the topics should be emphasised.
- iv) Continuity and co-relation of the exhibits should be in a chain system.

## Function of Ethnobotanical Museum :

The visual designs of various Ethnobotanical materials for a museum have a variety of functions such as :

- i) Plant introduction with migration of



ethnic races its effects.

- ii) Domestication of plants.
- iii) Introduction of cultivation.
- iv) Designing of gardens.
- v) Preservation of food materials and seeds.
- vi) Methods of uses of plants and plant parts for medicine, food, narcotic, beverage, material culture and magico-religious purpose.

Of course, to create an awareness about plant wealth around the tribal communities is an essential ingredient of Ethnobotanical museum.

#### Sources of Raw Materials of Ethnobotanical Museum :

- a) Ethnobotanical field studies among the various tribal communities and collection of data for exploration of plant species of economic importance and other natural resources.
- b) Collection of various information from consolidated literature, herbaria and archaeological remains.

#### Status of Ethnobotanical Science for purpose of Museum :

Rich Ethnobotanical collection in a museum help in studying the specific differentiation and geographical speciation of plants. In Hungarian and in some American museum botany has been included as a part of research and education. Natural History Museum at Washington and British Museum at Kew preserve rich collection of herbarium specimens of the world. Of

course, each and every Botanic Garden in nature's green museum. There are about 18500 Museums in the world of which India has its about 120 important public museums. Besides these there are more than 250 small sites and personal museums. Of course, about 650 biological museums attached to different universities and colleges are unknown or rarely known. But practically there is no Ethnobotanical Museum except the Ethnobotanical Museum at Central Botanical Laboratory, Howrah and the Ethnobotanical Museum at National Botanical Research Institute, Lucknow. Besides the various areas of the functions of the Ethnobotanical Museum it has the immense importance to trace out the large number of vanishing plant species whose conservation is an important subject.

#### History of Botanical Museum in India :

During the end of 19th century, Indian plants and plant products had great demand in Europe. In this perspective there was an exhibition at London. The samples of each and every plant and plant product were kept at Custom House in Calcutta and subsequently those were transferred in 1892 at Indian Museum Building in the name of Industrial Section of Indian Museum where all the Indian plant products were displayed in different groups such as timber, food, fodder, medicine, fiber, oil seeds, dye, tan, gum, resin etc. But all these are well-known plant products of economic importance. Therefore, it was known as museum of economic products which, in 1911, was attached with Botanical Survey of India. Similarly in 1940 the Botany Section at Madras



Museum was organised. After independence, Natural History Museum has come up at New Delhi where the subject Botany has been included in the museum for showing the plant evolution and economic uses. But there is want of exhibits of Ethnobotanical importance. In this perspective the paper deals with a few areas of the functions of Ethnobotanical Museum. There are good number of plants which are very common and wellknown in India for their various uses in Indian tradition and culture. But India is not the country of their origin. So the question may arise who brought those plants in India and when a list of such ten common plants has been included in this paper with their families, common names, tribal uses and the country of origin.

1. *Allium cepa* L. (Alliaceae), Onion, Pyanj: Country of origin Persia. Onion is a popular vegetable in India.

Bhoxa tribe of Grahwal use onion on blister and as cure for piles. Lodha tribe of West Bengal use fried seed against tooth-pain. The tribals of Madhya Pradesh (Chhindwara, Sagar) use fresh bulbs' juice in bleeding from nose, bulb-paste on burn wounds, in giddiness. In Maharashtra, Grahwal, Tamil Nadu, Uttar Pradesh, Bombay (Salsettle islands) fresh bulbs are applied on boils and the expressed juice is put as cure for earache.

2. *Allium sativum* L. (Alliaceae), Garlic, Lasan: Country of Origin Europe. Garlic is a common spice in India.

Santals of West Bengal, Bihar and Orissa use the fresh bulbs in the treatment of

rheumatism.

Lodhas and Khasias of West Bengal and Orissa use paste of garlic on septic wounds.

The tribals of Madhya Pradesh (Sagar, Chindwara) use garlic as cure for bronchites, cough, dropsy, fever, flatuens, pithisis, ringworm, whooping cough and in the treatment of ear-complaint respiratory disorders. In Grahwal Himalayas bulb paste is applied on eczema and on skin-eruption.

Tribals of Orissa (Dhasanvalley) use bulb-paste on piles.

3. *Clitoria ternata* L. (Fabaceae), Aparajita: Country of origin Paleotropical.

Santals and Mundas of West Bengal and Bihar use root-extract of white flowered plant as cure for catarrach.

The tribals of Kerala (Cannanore) and Tamilnadu use fresh root for abortion purpose and root-paste as cure for abdominal swelling.

In Orissa (Dhasan valley) root-paste is used for the treatment of goitre and leprosy.

Tribals of Maharashtra use seed powder as purgative.

4. *Cynodon dactylon* Pers. (Poaceae), Bermuda grass, Dhub Grass: country of origina Tropical America.

Common Indian lawn-grass and pasture. Santals of Bihar and West Bengal use plant paste for antifertility purpose.

Lodhas, Mundas and Khasias of West Bengal and Orissa use plant body as cure for carbuncle, cramps, sores



wounds and venereal diseases.

Tribals of Assam, Meghalaya use plant paste in menstrual complaint.

In Madhya Pradesh (Sagar) the grass is used in dropsy and urinary complaint.

Tribals of Grahwal Himalayas use plant decoction as cure for hysteria, piles and diseases of ophthalmia.

5. *Ananas comosus* (L.) Merrill (Bromeliaceae), Pineapple, Anaras : country of origin South America.

Common fruit plant in India.

Nagas of Nagaland use unripe fruit for abortion purpose.

Lodhas and Santals use leaf juice against intestinal worms.

Tribals of Assam (Kamrup district) use fresh leaf extract as anthelmintic.

6. *Mimosa pudica* L. (Mimosaceae), Sensitive plant, Lajwanti : country of origin Brazil. Common sensitive plant.

Santals of Bihar (Santal Parganas) give root paste to women for antifertility purpose.

Totos of West Bengal (Jalpiguri) use fresh root as hairdo for expediting childbirth.

Tribals of Orissa use root paste as diuretic.

Tribals of Bihar (Hazaribagh) apply plant in insomnia.

In Kerala and Haryana (Kurukshetra) plant is used as cure for hydrocele and epilepsy respectively.

In Madhya Pradesh (sagar) root extract is given in kidney diseases and in gravel.

7. *Strychnos nux-vomica* L. (Loganiaceae), Nux-vomica, Kuchila : country of origin Sri Lanka. Common nux-vomica tree in India.

Santal, Oraons, Mundas, Lodhas, Birhores, Kondhs of West Bengal, Bihar and Orissa use seed extraction for muscle relaxation, against night wetting. Seed oil use as cure for rheumatic pain, piles, syphilis and limb paralysis.

In Orissa seed powder is used on eczema.

Tribal of Kerala use seed decoction in Chicken Pox and in fever.

In Bihar (Chatanagpur) seed decoction is given in labour pain.

8. *Psidium guajava* L. (Myrtaceae), Guava, Amrud : country of origin, Central America.

Common guava fruit tree in India.

Bhoxa tribe of Grahwal use flower paste against blister in mouth, cold and cough.

Santals of Bihar apply leaf paste on carbuncle and sores.

Mikirs of Mikir hills use bark decoction as anthelmintic as cure for dysentery and somachache.

In Assam and Arunachal leaf decoction is given for dysentery and diarrhoea.

Tribals of Bihar (Ranchi & Hazaribagh) use leaf decoction for treatment of gonorrhoea.

Tribals of Assam (Kamrup) give leaf paste against menstrual disorder.

In Uttar Pradesh (Vanaras) fresh leaf juice is used in dysentery.



9. *Capsicum frutescens* L. (Solanaceae), Common capsicum : country of origin, Tropical America.

Common capsicum plant in India.

Fruit is a source of rich capsacin and cazenne pepper.

Fresh fruit is used as a carminative and ruberfacient.

Fruit powder is employed in suces and preparation of Mandram.

10. *Zingiber officinale* Rosc. (Zingiberaceae), Ginger Adrak : country of origin, oriental Asia.

Common ginger plant in India.

Santals, Mundas, and Khasias of Bihar, Orissa and West Bengal use rhizome as cure for asthma, bronchitis, cholera, constipation, diarrhoea, cold, indigestion

and puerple fever.

Nagas of Nagaland apply rhizome paste to ally labour pain and as remedy of throat troubles.

Lodhas and Mech of West Bengal use rhizome paste on bone fracture.

Tribals of Rajasthan use rhizome as abortifient.

The probable time of introduction of such plants in India and the introducers are still unknown. The study of Ethnobotanical Science can only give the clues of these questions.

In India there are about 1600 plant species are threatened, rare and endangered. A list of ten such important vanishing plant species with their families, common names has been provided in this paper.

#### A LIST OF TEN VANISHING PLANT SPECIES

Sl. No.	Botanical name	Family	Common name	Remarks
1.	<i>Aconitum ferox</i> Wall.ex Ser.	Ranunculaceae	Indian Aconite	Medicine
2.	<i>Atropa belladonna</i> L.	Solanaceae	Indian Belladonna	-do-
3.	<i>Colchicum luteum</i> Baker	Liliaceae	Hirantutiya	-do-
4.	<i>Coptis teeta</i> Wall.	Ranunculaceae	Gold thread	-do-
5.	<i>Orchis latifolia</i> L.	Orchidaceae	Indian Orchis	-do-
6.	<i>Podophyllum hexandrum</i> Royle	Berberidaceae	Indian Podophyllum	-do-
7.	<i>Swertia chirayita</i> (Roxb. ex Flem) Karst.	Gentianaceae	Chiretta	-do-
8.	<i>Nardostachys jatamansi</i> DC.	Valerianaceae	Indian Nard.	-do-
9.	<i>Sorbus cuspidata</i> (Spach) Hedl.	Rosaceae	Himalayan White beam	-do-
10.	<i>Rauvolfia serpentina</i> Benth. ex Kurz	Apocynaceae	Serpentine	-do-



The plants in cultivation have come through domestication. A list of such ten plant species has been incorporated in this paper. The plants are provided with recent botanical names, families, common names.

Sl. No.	Botanical name	Family	Common name	Remarks
1.	<i>Citrus assamensis</i>	Rutaceae	—	Fruit
2.	<i>Musa cheesmanii</i> Simmonds	Musaceae	—	Food
3.	<i>Trichosanthes Khasiana</i>	Cucurbitaceae	—	Food
4.	<i>Alpina galanga</i> Willd.	Zingiberaceae	Galanga	Medicine
5.	<i>Piper cubeba</i> L.f.	Piperaceae	Cubebs	Medicine
6.	<i>Piper chaba</i> L.	Piperaceae	Chaba pepper	Food & Medicine
7.	<i>Rheum emodi</i> Wall. ex Reld.	Polygonaceae	Rhubarb	Medicine
8.	<i>Rhus hookeri</i> Sahnii & Bahadur	Anacardiaceae	—	Medicine
9.	<i>Elaeocarpus sphaericus</i> (Gaertn.) K. Schum.	Elaeocarpaceae	Utra sumbead tree	Medicine
10.	<i>Hedychium spicatum</i> Buch.-Ham.	Zingiberaceae	Spiked ginger lily	Plant of Holifestov

Out of 45000 plant species in India about 3000 wild plants are consumed by the Indian tribal and other ethnic communities. A list of such ten common plants is included in this paper with botanical name, family and popular name, if any, and part(s) used.

Sl. No.	Botanical name	Family	Popular name	Part(s) used
1.	<i>Alternanthera philoxeroides</i> Griseb.	Amaranthaceae	Alligator weed	Whole plant
2.	<i>Alternanthera sessilis</i> DC.	Amaranthaceae	Sanchi	Whole plant
3.	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Prickly amaranth	Whole plant
4.	<i>Dioscorea</i> spp.	Dioscoreaceae	Asiatic yam	Yam
5.	<i>Antidesma diandrum</i> Heyne ex Roth	Euphorbiaceae	Mathaara	Leaf
6.	<i>Fagopyrum esculentum</i> Moench.	Polygonaceae	Buck wheat	seed and twig
7.	<i>Randia spinosa</i> Poir.	Rubiaceae	Common emetic nut	Fruit and Leaf
8.	<i>Lamium album</i> L.	Lamiaceae	White deadnettle	Leaf
9.	<i>Polygonum molle</i> D. Don	Polygonaceae	Thothe	Twig
10.	<i>Nymphaea nouchali</i> Bum.f.	Nymphaeaceae	Water lily	Whole plant



A biological screening about 300 plant species used by tribal communities has been carried out. A list of such ten plants has been incorporated in this paper with botanical identity, family, popular name and important active principles.

Sl. No.	Botanical name	Family	Popular name	Active principle
1.	<i>Andrographis paniculata</i> ex Nees	Wall. Acanthaceae	Creat, Kalmegh	Andrographolide official dr in I.P.
2.	<i>Achyranthes aspera</i> L.	Amaranthaceae	Cheff flower	Achyrol
3.	<i>Aconitum ferox</i> Wall.ex Ser.	Ranunculaceae	Indian Aconite	Aconite
4.	<i>Acorus calamus</i> L.	Araceae	Sweet flag	Calamus oil
5.	<i>Justicia adhatodab</i> Medic.	Acanthaceae	Vasaka	Vasakin
6.	<i>Barleria prionites</i> L.	Acanthaceae	Jhinti	Sitosterol
7.	<i>Cissampelos pareira</i> L.	Menispermaceae	Pareira brava	Hayatine
8.	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Dudhi	Tenol, Euphorbol Hexacosonate
9.	<i>Asparagus racemosus</i> Wild.	Asparagaceae	Satawar	Str. of disaccharide
10.	<i>Curculigo orchiioides</i> Gaertn.	Amaryllidaceae	Musli	Yuccagenin and Lycori

### Plants in politics

Some plants like *Indigofera* (Nil), *Diospyros* (Kendu), *Santalum* (Sandal) etc. have played a great role in Indian politics. Cultivation of indigofera plant for extraction of natural indigo during the British period created anti-British movement in India. Kendu leaf or Bridi leaf in Orissa and M.P. States creates sensation in political affairs. Similarly Sandal wood/oil acts in Karnataka.

### Some prehistoric plants

There are a good number of plants such as *Hibiscus rosasinensis* L. (Java), *Aegle marmelos* Corree ex Roxb. (Bel.), *Ocimum sanctum* L. (Tulsi), *Terminalia chebula* Retz. (Haritaki) etc. are largely used in India both for religious and cultural purposes. But all these plant species are not of Indian origin. So, again it is a question of research when and how these plant species have taken firm roots in Indian culture. In this perspec-



tive it can be mentioned that *Pinus roxburghii* Sarg. (Chir Pines), *Santalum album* L. (Sandal woods) have migrated from Himalayan region and Nilgiri Hills respectively to Narhan (600 B.C. - 200 B.C.). Similarly *Strychnos nux-vomica* L. (Kuchila) being the native plant of Sri Lanka, was found to be used in Ayurveda (ca 1000 B.C. - 800 B.C.) and *Phoenix dactylifera* L. being the native palm of Afghanistan was found to be used by Charak (1000 B.C.), and Susruta (800 B.C.). Probably Sandal wood oil being the oldest perfume in India has been employed in Ayurveda. It appears that Indo-Aryan probably, took this perfume from Dravidian culture during Vedic period.

## DISCUSSION

Ethnobotany in a museum is, therefore, introducing science to the non-science peo-

ple; a lesson to those who know little about the subject. It is an illustration of tribal heritage of emperic knowledge systems about plant wealth of their surroundings to the educated visitors. It can serve as a guide to the researchers. Ethnobotany in these perspectives is a new addition of science to a museum.

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# BIOLOGICAL SPECIMENS AND THEIR IMPORTANCE TO THE VISITOR THROUGH NATURAL HISTORY MUSEUM

L. Dhanapati Devi

## Introduction

In Manipur the natural resources are very rich with their distinctive flora and fauna. Many of the flora and fauna of Manipur are different from that of other parts of the country. Manipur clearly falls within the monsoon belt of India. The climate in the western part and also in the south eastern corner around Moreh can be called tropical. The pattern of precipitation and absence of forest except on high hill tops have resulted in a climate of sub-tropical type in the rest of the area with cold winter and warm summer with moderate to heavy rainfall.

The rich flora and fauna of the state have not been explored systematically so far by any botanist and zoologist. A scientific exploration is needed to understand the richness of the resources of the region and to make these known to the rest of the world. Due to climatic and geographical condition Manipur is very rich in epiphytal, terrestrial and sub-terrestrial Orchids of the tropical type.

Among the important wild life found in the state mentioned may be made of Brow-antlered Deer, Leopard, Himalayan black Bear, Sambar, Hog deer, Python, various resident and migratory Bird, Fish, Reptile and Invertebrate animals. The Brow antlered deer is found nowhere in the world except in Manipur. Keibul Lamjao National Park in India is the ideal home of this most rare deer species. The vast thick concentration of half decay water hyacinths locally known as Phumdi on which grow other plants is the ideal habitat of this shy animal for its survival and breeding. This floating park is among the few places least disturbed by men.

The natural history museum is the window to the natural world. It can play an important role in the publicity of the natural wealth of the area and in attracting all the categories of visitors. Presentation of Biological specimens can be made so effective to tell the story about the richness of the nature, its beauty and its wonders and to enhance our knowledge about the world.



## Flora of Manipur

Several thousands of species have been recorded from Manipur and out of which about thousand species have been reported to be endemic. Many of these endemic species have been disappearing. Some of the endemic and endangered species along with local name within brackets are given below :

*Alisma plantago* L.

(Kaothum)

*Andrographis paniculata* Nees.

(Vubati)

*Aphanamixis polystachya* Wall.

(Heirangkhoi)

*Azadirachta indica* A. Juss

(Neem)

*Bauhinia vari egata* L.

(Chingthao arangba)

*Bombax ceiba* L.

(Tera).

*Lilium macklinial*, F.K.W.

(Shiroi lili)

*Canna indica* L.

(Laphurit)

*Casia fistula* L

(Chaohui)

*Cycas pectinata* Griff.

(Yendang)

*Dillenia indica* L.

(Heigri).

*Entada p haseoloides* Merril.

(Kangkhin)

*Olea europea* L.

(Chorphon)

*Oroxylum indicum* Vent.

(Samba)

*Rhus Succedanea*

(Heimang)

*R. Javanica* L.

(Heining)

*Sap indu trifoliatu*s L.

(Kekru)

*Thevatia nerifolia* Juse.

(Utong lei)

Besides the above mentioned rare and endemic plants of Manipur, special mention may be made of the rich Orchid flora of Manipur. A recent collection of the Orchids of Manipur by the Forest Department of Manipur revealed about 300 species of Orchid belonging to 80 generas. Some of the Orchids which are considered to be rare and endangered endemic species of the state are given below :-

*Aerides Vandarum* Rechb. F.

*Aseocentrum ampullaceum* L.

*Calanthe veratrifolia* R. Br.

*Dendrobium bensoniae* Rechb. F.

*D. boxalli* Rechb. F.

*D. Crepidatum* L.

*D. draconis* Rechb F.

*D. falconeri* Hook.

*D. gibomi* Paxt.

*D. infundibulum* Rechb F

*D. Jankinssii* Wallich.

*D. noble* L.

*D. wardanum* Warner.

*Pap hiopedilum hirsutissimum* Pfitz.

*Pleione humitis* Don.

*Thunia marshalliana* Rechb F.



*Vanda amesiana* Rehb. F.

### Fauna of Manipur

The fauna of Manipur has not been properly investigated. The literature on the fauna of Manipur is very much limited except of a few occasional reports on the occurrence of certain rare and endangered endemic species in this state. Based on the data given by various workers and some recent collections, the following species are endemic, rare and endangered. The local name have been given in parentheses.

#### A) Fishes :

*Puntius jayarami* Singh & Singh

*Mystus microphthalmus* Day.

*M. leucophosis*.

*Monopterus albus* Zuiew.

*Noemacheilus manipurensis* Choudhuri.  
(Leingoiphon).

*N. sekmiensis*.

*Osteobrama balangiri* Val.

#### B) Amphibians :

*Rana limnocharis* Boie.  
(Hangoi tangsang)

*Bufo mel anostictus* Schneider.  
(Hangoi porobi)

*Tylototriton verrucosus* Anderson  
(Chum manbi)

#### C) Reptiles :

*Python* sp.  
(Lairel)

*Typhlops diardi* Schlegel.  
(Tipun napun)

*Tortoise* Sp.  
(Thenggu)

*Veranus salvator* Laurenti.  
(Hangkok)

#### D) Birds :

*Anas strepera strepera*.  
(Nganu thoidingnam).

*Rhodonesa caryophyllacea*.  
(Nganu kokngangbi).

*Nycticorax nycticorax*.  
(Chongkhu)

*Anas creacea*.  
(Surit).

*Nettapus cremandelianus*.  
(Nganu pedek).

*Falco biamicus* Jugger.  
(Khunu Kharang).

*Bucer bicornis*.  
(Langmeidong)

*Tragopan blythi*.  
(Tragop an)

#### E) Mamals :

*Bos gaurus* H. Smith.  
(Lamsan)

*Capricornis sumataensis*.  
(Sabeng)

*Cervus eldi eidli* Mc Clelland.  
(Sangai)

*C. unicular*.  
(Sajal)

*Cuone alpinus* pallas.  
(Huithou)



*Elephas maximus* Linnacus.

(Shamu)

*Felis bengelensis*.

(Keijeng lang)

*Muntiacus muntjak*.

(Sajee angangba).

*Nycticebus coucang*.

(Yong ikaithibi)

### Conclusion :

All the history regarding the evolution and development of animals, plants and earth from their origin to the present form is the history of the mysterious thing called nature. The subject of natural history is close to the human being. Human life directly or indirectly depends upon nature and its various resources for survival. Therefore, life on earth can not exist without nature. From the beginning there has been a general tendency of human being to destroy nature and its resources. These various resources responsible for maintaining life on earth should not be destroyed in order to produce the harmful effects of disturbing the ecological balance. On the contrary these resources should be utilised in such a manner that these may be protected for the coming generations.

A museum was originally meant for the primary use of the specialists. During the recent years the general public has been taking increasing interest in the educational value of the museum. The collection of the museum specimens can be put to the best use of the general public in the study of the natural resources and cultural wealth of the

state. It is true that the animals and plants are best studies in nature. However the study of the natural history through the preserved specimens may even prove in certain cases to be more effective for the simple reason that we can not make a detail and minute observation of the anatomy and morphology of certain animals in their natural living condition. At the same time these animals may not be available in their natural condition any time at our disposal.

As for the flora and fauna of Manipur a number of animals have been reported to be rare species and some of them have become extinct already. As for instance the brow antlered deer which is an endangered wild life available in Manipur only and no where else in the world is almost becoming extinct because of the decrease of both plant and animal kingdoms, though a difficult task, should not be ignored particularly when it involves the endangered species. The existence and importance of the valuable species are not properly known to the general public. Hence it becomes essential to collect and preserve specimens of these species along with proper records and documentation in the natural history gallery of every museum. Needless to say that the specimens of extinct and endangered species will always find a special place in such a gallery which is one of store house of knowledge and information. None can deny the educational value or significance of museum and in view of rich and distinctive flora and fauna of Manipur, the establishment of a Natural History museum at Manipur is a fulfilment of a long felt need.



## DEMOCRATIC TRENDS AMONG THE INDIAN TRIBES

L. K. Mahapatra  
Sheela Mahapatra

### Introductory Conceptualization

We in India follow the model of "representative democracy". In Greek city states the model of "direct democracy" was in operation; however, there the slaves were not participants in this form of democracy. When Aristotle said that in democratic state, the people or *demos* were sovereign, he did not include the slaves. Under Indian constitution there is no slavery and there is universal adult suffrage without any distinction. The last bastion of slavery was in North Eastern Frontier Agency (NEFA), which later became the state of Arunachal Pradesh through a political transformation of the region. All the tribal areas in North-eastern States are participating in "representative democracy" by electing members to the Lok Sabha, Rajya Sabha and the respective State Assembly in the states. However, "representative democracy" at the national level may coexist, rather effortlessly, along with "direct democracy" at the village or even inter-village levels. It has to be ascertained whether nomenclature of "Chief", "Chieftain", or "Sardar" or even "Kingship"

or "Raja" as among the Munda tribe, does really subvert the "direct democracy" at village level or traditional "representative democracy" at the regional, inter-village level.

Whether state is not formed, there may still be political organization in stateless or acephalous societies. Radcliffe-Brown has conceptualized political organization as "that part of the total organization which is concerned with the maintenance or establishment of social order, within a territorial framework, by the organized exercise of coercive authority, through the use, or the possibility of use, of physical force." Professor Schapera (1956) makes it further explicit by specifying "the establishment and maintenance of internal cooperation and external independence". When such political organization exists along with laws, or rulers or government, it is called a "political community". Every political community has rules regarding legitimate use of force and when it is to be used; when certain of its members have authority to take communal decisions, then Schapera says, there is "mini-



mal Government". This 'minimal government' may operate in three senses, as elaborated by Lucy Mair (1962): (1) The aggregate of people who look to a common source for decisions as to how they shall act may be very small; (2) The number of recognized positions of leadership may be very small; (3) The extent to which people holding such position can in fact exercise either leadership or authority may be very small.

As for the simplest form of the state, Lucy Mair asserts that it entails the recognition that one body of kin have an exclusive claim to provide the ruler from among themselves. This agrees with John Stuart Mill's conception of democracy as one concept which accommodates the whole people or some members of them in the socio-political process. Democracy is always conceptualized by the western political thinkers either at the level of state or government. Prof. Dicey conceives of democracy as a form of government in which the governing body is a comparatively large faction of the population. On the other hand, for Lord Bryce democracy is the form of government in which the ruling of the state is legally vested not in any part, class or classes, but in the members of the community as a whole. Whether we have a political community or polity in which a large or small faction legitimately leads or governs or we have all the members participating in socio-political process, there may be democracy based on self-government, which is the essence of democracy as per Prof. C. D. Burns.

Then, we have to distinguish between

the types of states in which the democratic forms or structures interact. Southall (1965) marks off three types of polities on the scale of political role differentiation. These are stateless society, segmentary states and unitary states. The 'state' in the modern usage is seen to comprise of four elements, territorial sovereignty, centralized government, hierarchically ranged specialized ruling or administrative classes and monopoly of legitimate force or political control by the centre. While in unitary states these features are found well-developed, in segmentary states, the smallest units of political organization, for example, a lineage or village section, is linked to ever more comprehensive units of political organization of an ascending order for various purposes, but each unit in this order stood in opposition to other similar units. Several levels of subordinate, political authority may be organized pyramidally in relation to the central authority. Segmentary states are flexible and fluctuating, even comprise peripheral units which may have political standing in several adjacent power pyramids, which thus become interlocked. Southall also distinguishes "hierarchical" from "pyramidal" state systems. "The term hierarchical should be used of a political system only when authority is allocated from the centre in a *de jure* and *de facto* sense. Of course, there is always the consent of the governed, but it is quite clear when right of allocation from the centre is regarded as legitimate by the majority in the sense that the enforcement of this right is also legitimate. The term pyramidal would be more appropriate for articulated structures in which the exercise of central author-



ity depends upon consensual delegation to it by the component units in each case, without any stable recognition of the right to enforce and maintain this by coercion. This situation obtains not only in acephalous segmentary lineage systems and a number of other types of stateless society but also in segmentary states". Again, "It is segmentary in the sense of its pyramidal power structure. If this concept of pyramidal is accepted, such states could be termed pyramidal in distinction from hierarchically unitary states". Thus, hierarchical, centralized, unitary states have to be distinguished from pyramidal, segmentary, consensual states. In Southall's schema the range of political system subsumes two polar types of delegation by the public (citizens), namely, *associational* and *complementary* delegation. "Associational delegation is a formally derived process occurring within an articulated system of specialized bodies or associations under the overall umbrella of the state. On the other hand complementary delegation arises from the complementary opposition of segments. Whether they are lineage segments or any other pyramidal units, whereby segmentary leaders, or impartial persons occupying roles constituted for this purpose, are virtually compelled by situational exigencies to act with a certain temporary but legitimate and truly delegated authority, however frail or transient". The most specialized states in the modern world exemplify associational delegation in various forms, whether the process of delegation is supposed to take the form of popular choice between alternative candidates, or whether it is rather a ritual affir-

mation of candidates in power. In associational delegation with consensual basis of power it is certain that the delegation will occur and be maintained and reaffirmed as long as the system itself is maintained. Without such delegation the system would collapse. "But it is not certain to whom the delegation will be, since it is essentially an achieved role. Apart from the actual occasions of formal delegation, when ritual expression is given to the ideology that power is conferred upon the leaders by the people, the power structure is distinctly hierarchical, with adequate imperative coordination". Southall then contrasts this with complementary delegation which "is contingent upon at least partially ascribed roles, it is essentially situational and control from the top of the pyramid may not outlast the situation itself. If delegation occurs, it may be certain to whom it will occur, but whether or when it will occur is by no means certain" (Gulliver, 1963). Nonetheless, although the actual exercise of imperative control is so sporadic, the possibility and propriety of its recurrence may be continually reaffirmed in ritual. Political activity thus floats on a ritual stream. To whom or to which role, complementary delegation applies tends to be implicit in a segmentary state (*cf.* Southall, 1965).

When the tribal chiefship or kingship or the power of the chief "is to some extent an expression of his place in the kin-structure,..... (and) interposed between the chief and the mass of the population are various levels of kingroup leaders, and the power of the chief as collector and distributor is, at the same time, the power of the kingroup



leaders, his position then is simply an extension of theirs. The chief has only limited power to enforce his will. He is caught between the necessity of generosity in order to gain and retain community support, and need to demand good from his followers in order to expand his power" (cf. Zagarell, 1986). No wonder, Zagarell finds a major contradiction haunting many chiefdoms as "the opposition of centralized government and the constraints of the dispersed power of kinship dominance" (cf. Roy Burman, 1994 : 73-74).

Surajit C. Sinha (1987) in his introduction to his edited book titled *Tribal Politics and State Systems in Pre-Colonial Eastern and Northeastern India* had indentified 4 levels and types of the polities, namely :

I. Small Chiefdoms : Mizo chief-taincies

II. Evolved Chiefdoms on the hills (mainly following pre-settled agricultural technology) : Khasi Siyems

III. Principalities in the forest regions of Eastern India : Orissa Princely States, Chotanagpur Raj and Mallabhum

IV. Archaic sovereign states in Northeast India : Ahom, Jaintia, Manipur and Dimasa states and the Himalayan frontier state of Sikkim.

Apart from the principalities in category III and Ahom, Manipur and Sikkim of category IV, all other chiefdoms, and archaic sovereign states in the remaining categories may be taken as variously evolved tribal polities on way to statehood.

He also notes that all the above cases of higher level of polities were evolved :

a) by coagulation of lineage or clan-based units of one or more ethnic groups;

b) and/or by conquest of segmentary tribes by larger principalities or states. (cf. Sinha, 1987 : xvii-xviii). In the pre-state level structures like the Mizo chiefdoms in Northeast India or the small-scale polities subsuming about twelve villages whether among the Munda, Bhumij and Ho tribes of east Central India were "entirely dependent on stratification of clan and lineage segments" (cf. *ibid.*).

We shall be discussing the level and pattern of democracy among the tribal communities of India, while observing, in the first instance, that "direct democracy" would be best exemplified in the tribal villages, hamlets, lineages and clans which are not affected by hierarchy or stratification in their internal structure, though they may be part of "hierarchical" state systems of varying complexity. However, the mere presence of a 'King' 'Raja' or 'Chief' does not preclude the operation of democracy inspite of the monarchy. The "archaic sovereign" states of Jaintia and Dimasa in Northeast India, for example, combined two levels of social and political system : tribal democratic chiefdoms in the hills with segmentary society of clans and lineages in the hills and hinduized monarchical/feudal rule in the plains areas of the respective states. Indeed, as Sinha (1987) notes, "The Khasi and Jaintia polities (particularly in the hill re-



gions) exhibit a unique pattern with their matrilineal succession and elaborate operation of participatory 'tribal' democracy". We have to remember that in "segmentary state" as Southall conceptualizes, the parts or segments of which the state is composed are seen as prior to the formal state; these segments are structurally as well as morally coherent units in themselves. Burton Stein observes (1980), "these parts or segments comprise a state in their recognition of a sacred ruler whose overlordship is of a moral sort and is expressed in an essentially ritual idiom". This is true of South Indian kings of Chola and Vijayanagara states as well as in tribal polities, such as in Khasi Syiemship, where the ancient Syiems were called *ki syiem blei*, godly syiems claiming divine origin (cf. Bareh, 1987). Thus, we find democracy may co-exist in segmentary and pyramidal states with complementary delegation as understood by Southall (1965) with more or less ascribed roles and prescribed rituals as the medium of interaction between segments and polities of various orders.

### Democracy in Traditional Tribal Society

Let me present a thumbnail approach to situate democracy in traditional society. In the stateless and even chiefless (acephalous) societies of the Andaman Islanders and other forager (hunter-foodgatherer) societies, for example, the Kadar in the mainland, there is no fixed or permanent leader set apart from others. All the households and menfolk in the band take decision on day-to-day matters. Only in the hunting expeditions. Normally the older people knew the

age-old customs and norms and hence were listened to in taking decisions relating to the community or disputes among the households. Hence the epithet *gerontocracy* or the rule by the aged in such societies. But by all accounts and by all standards there was democracy in all its senses among such peoples and there were no ascribed positions of higher or lower among them. Among the Birhor foragers and market-oriented people, the clan-head was more a ritual leader than an administrator. Among many swidden cultivators, there were both village level and inter-village level polity; the village was the forum where all male heads of households participated in decision-making; in the inter-village level there was often an occasion to bring together the village headmen and other village elders to meet and decide issues that related to all the villages in a contiguous region. Normally among the swiddening residents of the village, one group would trace their descent to first settlers and founders of the village and hence some privilege in having dominant say in the village matters in contrast to another group who had been later immigrants of the same ethnic group and incorporated into the village corporate body as junior partners. But in village assemblies both the sections participate fully, though the position of the priest originally priest-cum-headman from among the first settlers has a marked presence. (cf. Mahapatra, 1960).

When the state takes into cognizance the more or less permanent tribal villages and integrates these, however, marginally, into the state system, it recognizes the headmen and the special position of 'khutkattidars'



or the first settlers, and gives them some fixed privileges as among the Munda and Oraon peoples of Chotanagpur. We must remember that the Mauryan state in the 4th century B.C. had already controlled the village life and village structure; only the tribal villages were left almost untouched. King Ashoka had promised them protection, to be treated like his children. Therefore, the state traditionally did not interfere in the self-regulation of tribal society and self-management of tribal land resources. But when the Maurya state had the monopoly of iron-smelting and iron industry, this must have affected the Asurs and Agarias of Chotanagpur and Orissa region, who were reputed iron-smelters.

In the segmentary polity among the swiddeners of Mizoram, the Mizo chiefs had a council of elders belonging to a particular clan. These elders helped the Chief in village administration and justice. The Mizo chiefship became hereditary and the Sailo Chiefs claimed higher status and hierarchical principles were thus introduced, though commoners had kinship links with the chiefs. But the chief did not claim property rights in land. "Each claims the men of his tribe wherever they wander, or in whatever part of the country they may settle for the time to jhoom (swidden)" (MacKenzie, 1979 reprinted). Territorially-based chiefship was not the vogue. The chief did not cultivate his own land, but used slaves from other chief's control. In the settlements, which periodically shifted as per the swidden requirements, democratic management prevailed. "The nature of participation in economic and political spheres of clans/

lineages is broadly in terms of communality and equality" (Goswami, 1987). There was a lot of mobility and change of affiliation of the swiddeners from one chief to another (cf. Goswami, 1987).

When slavery prevailed among the swidden cultivators and terrace agriculturists who had developed clan/lineage system in segmentary opposition, the freemen were, of course, having all the decision-making power to themselves, not sharing it with the slaves. In northeastern frontier states in pre-British days such internal democracy in the privileged section contrasted with the position of the slaves. But invariably in history the womenfolk were participants in the democratic set-up among the tribes, as among the non-tribal people of India. This may not be the logically expected scenario among the matrilineally ordered societies of the Khasi and allied tribes and the Garo. But the facts do not corroborate this expectation.

Among the Khasi the village assembly (Dorbar Shnong) was the basic unit of local democracy the villagers choosing. Thus headmen and elders. The *raid* or a region had its Dorbar Raid (Raid assembly) and at the apex the Syiem's (chief's) court and council. On the top of the Syiem and his Dorbar (Ki Bakhraw) there was the supreme authority, Dorbar Hima (State Assembly), alternately known as Dorbar Blei (the Assembly of God) was the supreme authority of the Khasi people. This supreme Dorbar is convened to deal with very important issues such as, dethroning the Syiem, or selecting a new Syiem, impeach-



ment of the Syiem, or matters of war and peace, inter-state commerce etc. with other Syiemship (kingdom). This special Assembly is called Ka Dorbar Laiphew Shnong as all the representatives and elders of the villages constituting the realm (Syiemship) are to be present, each village sending its chief priest (Lyngdoh) and Basan (administrator) along with two or three village elders, elderly (above 50 years) elderly and mature enough to know the state matters.

Rarely, however, a still higher assembly of the whole state Ka Dorbar Ka Hima Pyllun was convened to solve the most thorny and vexed problems because of the vastness of the kingdom and the magnitude of the population involved, the previous mentioned Dorbar is held to assert the decision of the kingdom as a whole. The village assemblies, similarly, are convened when an issue cannot be resolved by the village headman and the village in the village council. Thus the village assembly consisting of all the village male adults meets in direct democracy.

But all the leaders, the Syiem, priests, bureaucrats like ministers and other court officials under the Syiem, at all the levels of the assemblies or courts or councils are men only. The Khasi author, Mawrie (1981) observes: A Khasi knows how to determine the power of the Syiem (king) as well as that of the people in the administration of the state. In all things the power of the people ranks supreme. A limitation is placed on the power of the Syiem so that he is really no more than a nominal head and ruler of the state. Again he notes, "the basis of the

whole state is the village and the village assembly". The Syiemship came much later. Indeed, there are some territories, ruled by Lyngdoh priests, which have not acceded to any Syiemship (e.g. Mawphlang and Lynam), or other territories ruled by Sirdars (Bareh, 1987). On the other hand, some Syiems assumed higher, divine status as Syiem-Blei, who were supposed to be the ancient Syiems, and wielded more influence and prestige.

The Jaintia or Pnar, another matrilineal tribe of presentday Meghalaya had become settled cultivators with greater centralization of authority and a sovereign state, albeit called "archaic" by Surajit Sinha. They consolidated the *raids* in the hills into *elaka* headed by Dalois or Governor, assisted by *pator* or lieutenant governor. Both of them were elected by all adult male members of the *elaka* from among the original clans of the *elaka*. The Daloiships were either "independent republics" in the hills or "oligarchies" depending on the nature of the *elakas*, though most would be oligarchies with power concentrated in the Dalois or Langdoh priest. When there was territorial expansion of the Jaintia into the plains the Jaintia Raja become more and more identified as a Hindu Raja with absolute power, though advised by a state council or Raj Durbar with the Brahman Pandits, Dalois and the Maulavis (Islamic Scholars) and other nobles. The Raja or Jaintia plains doubled as the Syiem of Jaintia Hills. Though the claimed divine origin, through Brahmanical influence. However, as the Syiem in the hills he was a nominal ruler over the Dalois in the *elakas*, the latter pay-



ing a tribute for rituals at Jaintiapur. The Syiem maintained his loyalty to tribal gods and goddesses, and the ancestral spirits. The succession to the throne was by sister's son, not his own son. However, the original egalitarianism in the society was replaced by the hierarchy, placing the original clans much above the clans of the commoners' who were given to do menial jobs for the Daloi and the Councillors in council meeting. Among the Jaintia also the elective principle was not extended to women (cf. Pakem, 1987).

Similarly, the tribal Dimasa achieved an "archaic" sovereign state with a Hinduized king with divine origin at the apex with all the trappings of royal court and sanskritization. From the base of kin-group-centred polity to a heterogeneous *khel*-based kingdom was a great historical experiment in precolonial times (cf. Bhattacharya, 1987). *Khel* was basically a guild-like unit of agricultural community, members of which were not bound by ties of kindred, caste, nationality or religion, but were voluntarily oriented to achieve productivity and other purposes. The tribal affiliation of the Raja was maintained, but the tribal *sengfong*, an autonomous powerful organization, was keeping the king in check, if he deviated from tribal morals and values. The kingdom fell partly due to transgression of tribal code.

Among the settled cultivator Munda of Chotanagpur, there were two well-known institutions in self-government. The *Panch* the village community had headman (*munda*), the priest (*pahan*) and the messen-

ger (*mahato*) as officials recruited usually from the dominant clan, tracing its dominance to being first settlers. Though the village headmanship was hereditary in the family, the office of priest was selected from the *pahan* lineage by a process of divination, thus according supernatural selection. The messenger was recruited from *Mahato* lineage and his position is hereditary. In a uniclave village the village council acts also as clan council; in a multiclave village the dominant first settlers' clan had all the privileges, with the other clans having their respective clan elders for self-regulation. The village adult heads of households met in an assembly to take decision in village and inter-clan matters with the village officials of the Panch guiding the deliberations and executing the decisions. The village Panch had also religious and ritual functions to ensure the well-being of the people and prosperity of the village.

*Parha Panch* is an inter-village political organization which looks after several villages with different clans and heterogeneous population. However, originally *parha* was a social and political organization of 'daughter' villages established by an expanding clan. In Parha assembly, sometimes representatives of as many as 30 villages participated with the membership of several clans. Very interestingly Raja or Parha Raja was at the head of Parha officials. The Parha Panch was meeting every year, at least once. Both the village Panch and Parha Panch were seized with tribal social morality and values, and not merely with disputes within or between social units and villages. Consensus rather than judgement was the basis of



democratic decision making in these institutions. Often sister *Parha* organizations participate to deliberate and decide on issues which concern the Munda people in a particular region (For details cf. Choudhury, 1977). As noted above, we have here direct democracy at the village level and representative democracy at the *Parha* level.

Among the Santal of Chotanagpur, however, we encounter some special features of political organization. Panchayat or a council of village elders with *manjhi* or village headman at the head and the *naeke* or priest, deputy to the village headman (*Paranik* or *Paramanik*), and to the priest (*Kudam naeke*) *jog-manjhi* the official for youth morals and affairs, and *godet* or messenger of the Panchayat was operative at the village level. In some villages, there might be a *jog-Paranik* or assistant to the *Paranik*. These officials were elected at the time of the foundation of the villages, thus belong to the founders' clan and hence hereditary, with patrilineal succession. But the villagers have the authority to recall any official thought to be incompetent or selfish and elect new one. The entire village sits, when the village Panchayat cannot solve a problem. Consensus or at least a definite majority opinion must emerge after prolonged discussion in order to solve a problem.

About ten or twelve villages constitute a higher inter-village political unit under the head, called *Pargana* or *Parganait*. He is elected from among the village headmen of this larger unit. *Pargana* is assisted by *desmanjhi*. The Panchayat of this higher unit consists of all the village headmen of the

constituent villages plus some other influential men of the region. Here is the forum for solving inter-village disputes or intractable cases defying solution at the village panchayat.

"But even the *Pargana* and his *Panchayat* do not exercise final authority. This is vested in the people of a number of groups of villages forming an entire district (region). This final authority is exercised once every year through the medium of the *Lo bir* or Hunt Council. In the *Lo bir*, all Santal, with or without an official position, have equal status. Any matter may be raised here by anyone, and is fully discussed by all interested. As the highest court of appeal, the decisions of the *Lo bir* are binding on all. The decision about ex-communicating a person from Santal Society can be taken and executed only by *Lo bir*" (cf. Datta-Majumder, 1956). However, *pargana* Panchayat and *Lo bir* intervene only in exceptional cases. Datta-Majumder unfortunately does not clarify how the amorphous body *Lo bir* can execute its decisions. This *Lo bir* institution is a unique feature of the Santal without any concrete political unit being associated with it. This is also an instance of direct democracy with exemplary political equality of all members.

Among the chiefless, feuding Naga tribes of Nagaland, there were clan, lineage and moiety based on kinship and agnatic descent. The segmentary principles ruled and there was political significance of the class and the lineage, which were land-holding corporate groups. "In the past, the clan membership was co-terminous with the



political membership because the clan was the largest jural community. Help in the inter-clan feud and inter-village war was a necessary pre-requisite of clan solidarity. It was the clan locality whose defence was the ultimate goal of all the component lineages of a clan. Defined by the canon of agnatic descent these lineages generally enjoy equal politico-jural statuses" (Das, 1993 : 143).

J. H. Hutton had significantly observed as to highlight the primacy of the clan in a village in the segmentary system of society : "So distinct is the clan from the village that it forms almost a village in itself, often fortified within the village inside in its own boundaries and not infrequently at variance almost amounting to war with other clans in the same village. In almost every dispute between two men of different clans the clansmen on each side appear as partisans and ferment the discord" (Hutton, 1921).

The Dafla tribe of Arunachal Pradesh (formerly Northeastern Frontier Agency) were known for their fiercely agalitarian, feuding society in the then Subansiri Frontier Division, studied by von Fürer-Haimendorf. They had typically a segmentary society, where clans and lineages held all political power and there was not even a multi-clan, multi-lineage village society constituted with a council of elders to keep the segmentary groups away from feuding, raiding, slave-raiding, and maintaining intra-village, harmony (cf. von Fürer-Haimendorf, 1947). The Dafla to the west in Kameng Frontier Division, had however developed the village with a village coun-

cil (*bang*) and they were known as *bangni* or Dafla people with village (inter-clan) assembly in contradistinction to the eastern Dafla. Even then the *bangni*-Dafla do not have a separate term for village, as the Miji have. Interestingly, with similar segmentary society of clans and lineages as the Dafla had, even having similar superordinate relationship with the same, more interiorly placed Sulung tribe as an attached subservient community, the Miji tribe (to the west of the *bangni* Dafla) had village assembly and inter-village councils. These territory-based institutions contained the feuding clans and lineages in harmonious, though volatile, peace. We have to note that to the west of the *bangni* Dafla there was the centralized Tibetan state and the Aka polity with tribal chief. The eastern Dafla did not have the pressure of the centralized state unlike the western Dafla, who, thus were almost constrained to develop dependable solidarity at least at the village level. The Miji, in their turn, felt the threat of the centralized Tibetan State even more than the *bangni* Dafla, still farther to the east of the Miji, who thus played the role of the 'buffer' community between the Dafla and Tibet state (cf. Mahapatra, 1962).

We may, at this stage, come to a tentative generalization that the more (directly or incessantly) segmentary kin-based solidarity of society is threatened by the centralized state, the greater the tendency of the segmentary kin-based society to develop hierarchically organized territory-based society to sustain harmonious dependable solidarity as an adaptation to the threat situation. However, the Apa Tani of Subansiri Frontier Division, whom Professor



von Fürer-Haimendorf studied (1962) exhibited also village council and mechanism of feud and dissension control. This development was most probably in response to the severe physical threat of the eastern Dafla who carried on incessant raiding and feuding with the peace-loving, prosperous, terrace-agriculturist Apa Tani. Even then, "Apa Tani villages lack of centralized authority, wielding power over all the inhabitants, but village affairs are managed in a somewhat informal manner by a council of clan representatives (*buliang*). ...while the *buliang* guide and formulate public opinion there is no regular machinery to organize concerted action by all the inhabitants of a village. This is a source of weakness in the Apa Tanis' dealings with their war-like Dafla neighbours. It is not unusual for one quarter of a village to be involved in a bitter feud with some of the inhabitants of a neighbouring Dafla village, while the people of the other quarters continue trade-relations with their next-door neighbour's enemies" (von Fürer-Haimendorf, 1962 : 67-69).

We may now see the inverted relationship between direct democracy and representative democracy, the latter being more complex, suited to a heterogeneous people or a large-scale society requiring peace and harmony, or a society under severe threat in an inter-ethnic situation.

### Changes in the Democratic Institutions

#### a. Colonial Period

Many civilian officers and anthropologists have deplored the changes brought about by the colonial administration in the

democratic set-up and pattern of tribal life. For example, among the Santal the Manjhi and Pargana have been designated officials and have lost their cultural and social base in the tribal community. The same has happened among all the tribes of central and eastern India. Their devaluation and ineffectivity have occurred mostly because their powers of control and management of the common property resources (waste-lands, forests etc.) have been taken away and to that extent the community did not look upto them as in the past for redistribution of resources for survival.

Sometimes, because their community service lands were recorded as their individual holdings, a class of well-to-do village officials have emerged, as noted by Datta-Majumder (1956). The village-wise holdings of land and forest in many areas were assessed to land revenue as individual holdings and thus, the village as a corporate body was weakened in its most vital bases.

The judicial functions of the tribal political institutions were more and more taken over by the courts and other colonial legal institutions.

In the northeast, however, the customary laws of the tribes and their control and management of the common property resources were largely left unaffected, except that raiding, slave-taking and wars were stopped and to that extent the political clout of clan and village institutions were curbed.

Under colonial dispensation among the Naga tribes the headmen of the clan who exercised traditional judicial and administrative authority over the clan-district with



the consensus of the clan elders, reflecting the public opinion, were appointed village headmen *gaon-bura* and *dobasi* (literally, interpreters). The Gaonbura were given insignia of official power in the form of red-shawls and were to collect land or house-tax and shielded some juridical powers of dispute settlement. The tribal headmen however, continued to exercise their moral and social/ritual authority, but were to adjudicate in open *durbar* court, with at least 3 witnesses besides the complainant and accused (cf. Das, 1993).

On the other hand, almost everywhere, the authority of the hill chiefs, whether in Mizoram, Manipur or Nagaland or among the Khasi-Jaintia was enhanced or stabilized to the extent this promoted the colonial interests.

#### b. After Independence

Due to Mahatma Gandhi's insistence due importance was given to local self-government institutions, preeminently Panchayati Raj institutions in the constitution of India. After Independence almost all the states enacted Panchayati Raj Acts and created Statutory Panchayats which looked after secular, revenue and administrative matters, but not religious and social/moral matters as in the old Panchayat. The tribal people were made ward members in the ethnically heterogeneous Panchayats, where usually the non-tribal were dominant.

Choudhury finds in 1960's in Munda areas of Chotanagpur the following picture (1) The *Parha* Panchayat came in handy for propagation of Jharkhand ideology and party programmes after 1950's. (2) The Statutory Panchayat has not made signifi-

cant inroads into the Munda political system. This has happened because of two reasons. First, the traditional Munda *panch* still holds good in the society. I have mentioned earlier that during the last few years preceding my enquiry in 1965-66 a number of disputes have been referred to this *panch* and ultimately settled to the satisfaction of the disputants. All cases of inheritance and division or property have been decided by the tribal *panch*. This has been possible because such cases cannot be decided by the statutory panchayat as it is not empowered to do so. Secondly, the structure of the statutory panchayat is quite different from that of the tribal *panch* and *parha*. The latter two institutions are organised on the basis of kinship whereas the former is a heterogeneous affair. Specially also the statutory panchayat is neither limited to one village nor does it include all the villages of the *parha*. (3) It has been mentioned that *parha*, apart from its new political functions, operates in a limited way as the guardian of tribal morals. The village *panch*, however, has both secular and sacred functions. But a time is likely to come when the secular function of the *panch* will be completely taken over by the statutory panchayat. Only the sacred matters affecting the community life shall be relegated to the *panch*.

The Munda are governed under the Fifth Schedule of the Constitution, under which the State Governor has ultimate responsibility and the State Government have large authority to manage the development of tribal areas and insulate them from exploitation, land alienation etc. But in north-east India Sixth Schedule of the Constitution



is operative under which the predominantly isolated tribal areas have been granted Autonomous District Councils and Autonomous Regional Councils to ensure their self-regulation of internal affairs as per their customary laws and their self-management of common property and other village resources. Some progress has been achieved to statutorily codify the customary laws. Moreover, the customary laws have been given statutory validation, for example, by the Garo Hills Autonomous District Council (in Meghalaya) and the Pawi-Lakher Autonomous Regional Council (in Mizoram). The social customs and usages prevalent among different tribal communities have been given the force of law and have been deemed to have the force of law since the commencement of the Constitution on 26.1.1950. Similarly, validation of christian marriage and such other presentday issues has also been secured. All forest except reserve forest has come under the jurisdiction of the autonomous district councils and to that extent a great grievance of the tribal people has been attended to. But even then, the land rights are usually usufructuary rights and have no *de jure* basis. It is, however, debatable whether it is in the interest of the tribal people under the Sixth Schedule to reduce their clan/village/lineage lands held in common (with individuals' usufructuary rights) to private ownership rights. There have been District Council Courts, sub-ordinate courts and village courts to dispose of disputes in the light of the prevalent tribal mores and customs and the compatible laws of the country.

The tribal chiefship (Syiem) has been abolished among the Khasi; but there is still controversy, as also in the 1940's, whether the Mizo chiefs were democratic or autocratic. Some scholars tend to think that when the chiefs behave as trustees of the people in safeguarding their common property resources and other rights, they function in a democratic idiom. But when they arrogate to themselves all privileges and the resources for which they had been the trustee of the community, to that extent the democratic spirit and norms behind the chiefship may have been extinguished.

Among the Naga tribes, the *dobashi* became a permanent officer in the Nagaland State Government, with definite and well-defined judicial powers and range of punishment. They were to attend the Tribal Dobashi court regularly, located in the district and circle headquarters. *Gaon Bura* continued to function with minimal administrative authority for interacting with administration above the village. In common with all parts of Nagaland, each village has a statutory village council which consists of the nominees of the clans and lineages as also the government-appointed headmen or *gaon-bura*. Each village council elects one representative to an Area Council and Area Council members receive a nominal salary from the Government. The members of the District Regional Council are elected from among the members of the Area Councils on basis of representative for a population of about five hundred. Thus, the direct democracy and informal authority in the clan and lineage bodies have been substituted by representative democracy and hierarchical.



statutory authority of various tiers, the descent principle being relevant only at the village council level. Territorial units are structured without any more reference to descent or kinship (cf. Das, 1993).

#### Recent (1996) Changes under the Fifth Schedule

Scheduled Areas under the Fifth Schedule cover only about 60 percent of the total population. Under the 73rd Amendment to the Constitution of India, Panchayati Raj in non-tribal areas was strengthened, its resources augmented, and the women and weaker sections were empowered. But its extension to tribal areas was left to be decided later on. In 1996, in pursuance of the Bhuria Committee Report the Central Government enacted Panchayats (Extension to the Scheduled Areas) Act, 1996. This takes away the power of the State Legislature to make any law inconsistent with provisions of this Central Act. For the first time it has been explicitly provided that the state legislation on Panchayats shall be in consonance with the customary law, social and religious practices and traditional management practices of community resources. The Gram Sabha will be a village-level assembly, with Panchayats at higher levels upto District level. The Gram Sabha shall be competent to safeguard and preserve the traditions and customs of the people, their cultural identity, community resources and the customary mode of dispute resolution. Further, the Gram Sabha and Panchayats of appropriate level have been empowered to have ownership of minor forest produce, to be consulted in allocation of land, minor

minerals, minor water bodies, village market etc. and to have the authority to exercise control over institutions (like shools etc.) and functionaries in all social sectors.

Therefore, we find that local self-government and community empowerment as also the empowerment of the women and weaker sections (Scheduled Castes and Scheduled Tribes) have been ensured in the 73rd amendment to the Constitution along with the 1996 Central Act extending Panchayats to Scheduled Areas. Moreover, the total range of functions of the village Panchayat and other traditional Panchayats of higher level, which were not covered by the older Panchayati Raj institutions, have now been granted in favour of Gram Sabha and other Panchayat bodies. There are still many areas to be clarified, crystallized and systematized, if the democratic institutions of the tribal people are to be revitalized and stabilized at functional level in the modern days. For example, the Central Act 1996 stipulation that Gram Sabha shall consist of persons whose names are included in the electoral rolls for the Panchayat at the village level leaves the issue open — whether all the adult men and women of all the households, who are resident in the village, are members of the Gram Sabha. In the old traditional village Panchayat all the male heads of resident households were members in the village assembly. However, the women, who were always and traditionally left out in the political organization have been brought into the democratized political process under the 73rd amendment to the Constitution.



### Expanding Horizon of Tribal Democracy

In the view of Professor Roy Burman many of the tribes of India are no longer primitive in any sense of the term. He calls them "post-primitive", who are no longer centred in their vision or operation with their own village or local or even their own ethnic group. They consider themselves as men of the wide world, of the nation and of the humanity. They tend to judge issues for themselves by applying criteria and indices as meticulously as any other intellectual.

It will be worthwhile to listen to a few exemplars of these post-primitive intellectuals, who also introspect their own tribal situation.

Professor B. Pakem criticizes the inequities in his traditional society in respect of democracy as it functioned: "the role of the original clans in the nomination of candidate or candidates for political office did not give the non-original clans the chance to always elect the right person. Besides the ascriptive nature of nomination, the elective principle which was extended to all the male adults in the raid, did not cover females. The whole process was neither clumsy nor lacked proper thinking, but intentionally institutionalised to keep the reins of power and authority in the state with the original clans. In such a situation, it was doubtful whether democracy really existed in pre-British Jaintia state; or it could be a pointer to the emergence of a nascent class antagonism between the aristocratic stratum and the commoners within the tribe" (1987).

A Khasi intellectual, Hamlet Bareh (1987) observes that "the Khasi at all times had shown their genius for a federal organization where features of centralization and decentralization were consistently combined ...The jurisdictions of the state and local authorities was clearly defined and the State (syiem) would not usurp any of the rights or powers without mutually having consulted the local authority to arrive at a finally accepted decision." He considers it to be "a genuine form of democracy which offered a few parallels during the contemporary times."

W. Shaiza (1996) finds that "in the Panchayati Raj system decisions are taken, more or less, politically. Customary sentiments are somehow nullified. Projects, schemes and programmes are chalked out on the basis of majority decisions. All this is hardly in the interest of tribal people."

L. Tirkey (1996) observes: "one of the remarkable things among tribal organizations was that there was no election contested on groups or party basis as is seen prevalent in the present day Panchayat elections sponsored by the government. In the Panchayat elections party politics have crept in with money and muscle power. Such a Panchayat system is not suited to the tribal villages ...The tribals want self-rule in their villages and continue with their own traditional village Panchayat which no outside system or agents of party politics should disturb..."

The debate should start and end with them.



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# AN ODYSSEY OF THE ART AND CULTURE OF THE NORTH EAST INDIAN TRIBES

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North east India has got a rich heritage of tribal art and culture. There is a great variety of natural and cultural landscape. The region spread 1,81,300 sq. kilometres and comprises of the following states, Meghalaya, Tripura, Assam, Arunachal Pradesh, Nagaland, Manipur and Mizoram. This region is extremely rich in flora, fauna, minerals and other natural resources. The flora ranges from tropical rain forest to alpine and fauna has a similar range of variation from mithun, tiger, elephant rare single horned rhinoceros alongwith variety of birds.

Like the other parts of India the arts and crafts of the different tribal groups of this region are varied and numerous. Now let us have a look towards those different ethnic groups and the form and style of their art and culture.

There are more than 150 tribal groups are found in this region. The percentage of the tribal population in Assam is about 11. Here the widely spread main tribal group is 'Bodo Kachari'. They are also found in North Bengal and Tripura hills. The eastern

group of the 'Kachari' is called 'Chutiyas'. In West Bengal they are known as 'Meches'. The other branch of this group is known as 'Koch'. Some other branches are 'Dimasa Kachari', Rabha, Hajong, Garo, Lalung etc. Besides 'Kachari' the other groups are Mikir, Kuki etc.

The tradition and history of the Bodo people can be traced to early Mongoloid or Kirat movements, it is believed 'that the Kirat entered India through the Brahmaputra valley about three thousand years ago. The Kirat as a geographical and ethnic nation includes the Kinalayan tribes, the Bodos, the Nagas, the Kukis, the Ahoms the Indian Tibetians, the Khasis and the earlier tribes who are absorbed with the population of the North and North East India ! The Bodos are the most important of the Kirat tribes and constitute the basis of present day population of these area. They first settled in the Brahmaputra valley from where they gradually spread over. They are divided into a number of endogamous totemic clans. Monogamy is the rule, polyandry is strictly prohibited. They believe in supreme being and other malevolent spirits.



Their language belongs to Sino-Tibetan family.

Tribes of Assam know the art of weaving, particularly 'eri' cloth weaving, and the art of making gold and silver ornaments, pottery making and iron work.

In Meghalaya the main tribal groups are known as 'Khasis' and Garos'. The Khasis are divided into five divisions. The Khasi inhabiting the central point around Shillong, is called upland Khasi, the 'Syntengs' living in Jaintia hills, the 'Bhoi' inhabit hills to north and 'war' are found in the south. The origin of the Khasis is very uncertain, there are so many theories regarding their migration. The most accepted one as stated by K. P. Bahadur, 'is that they moved into Assam from the East'. The Garos are inhabiting in the hills known by the name.

The main division of the Khasis are neither strictly exogamous nor strictly endogamous, but they are more inclined to endogamy. Among them Siem or chief system is prevalent and he is the religious as well as secular head of the society. Marriage within the clan is strictly prohibited. The Khasis believed mainly in Animistic religion. The inheritance of property is always on female line, the youngest daughter gets the largest share. The Garos are divided into three exogamous clans. Though they are polygamous, but at present it is not found. They believe on supreme being and other malevolent spirits. They also believe of rebirth.

Both Khasis and Garos are good wood carvers, and also expert in the art of bamboo work and cane work. Poker work is found among the Khasis only.

The population in the valley of Manipur mainly consists of the Meitais. The Meitais are divided into seven exogamous clans. Each of the clans consists of subgroups called 'Yumnaks'. Division in clans on the basis of occupation is prevalent among them. They are polygamous property inherited through male line. They have a concept of a world and life after birth. The surrounding hills are occupied by the numerous tribes. In Manipur there are 29 tribes which may broadly be divided into Naga and Kukis. Under the Naga group there are Zemei, Liangmei, Rungmei (Kabui), Mao, Maron, Thongat, Thangkhul, Maring, Anal, Moyon, Mosong and Lamsong. The Kukis like the Aimol, the Chotho, the Chiru, the 'Keireng' and the 'Purum' perhaps have migrated to Manipur from Burma during the 16th century through the southern hills of Manipur. Whereas the other groups of the Kukis comprising the Simite, Paite, Zen, 'Thadou' Hmar etc, being unable to bear the constant Lussai raids, migrated from Lushai hills to the southern hills of Manipur in the 18th and 19th centuries.

Manipuris and most of the adjoining tribal people are generally good weavers and basket makers. The 'Meitais' know the art of making jewellery from gold and silver, and wood work.

The Nagas are divided into a number of subtribes such as the Aos, Angamis, Lhotas, Ragmas, Somas, Zemis, Changs, Konyaks, Phoms etc. (The sub-tribes are constantly forming new groups like the 'Chakhesangs', 'Zeliangs' and others). Besides the Nagas the other important tribes are Kuki, Dimas, Kachari, Mikir and Garo.



The Nagas belong to Indo Mogoloid, whose presence were noted as early as 10th century B.C. They are known as Kirat or non Aryans. The Nagas traditionally believe that they have migrated from the south. Each Naga groups are divided into a number of exogamous clans. Bachalors dormitory (Mooroong) is prevalent among them.

Almost all the tribes in Nagaland are expert in weaving, wood carving, bamboo and cane work. Pottery is little developed and only confined to certain groups. Iron work in Nagaland is comparatively a new craft. Poker work is also found in some tribes.

In Tripura the most important tribal groups are Tripuri, Riang and Jamatia. Besides the above tribal groups Haijongs, Nagas, Kukis and Lushais are also inhabited in good numbers. The Riangs are believed to be the member of Kuki-chin groups of people inhabiting in the Arakans of Burma. They spoke in a dialect closely related to Austro Asiatic family. They are believer of supreme being and a number of malevolent spirits.

Almost all the tribal groups in this state know the art of weaving.

In Mizoram a number of tribes inhabit, they are collectively called Mizos. The Mizos are broadly divided into five major and eleven minor sub-tribes. They are Lusei, Rabte, Hmar, Paite and Pawi. The eleven sub-tribes are Chawngthn, Chawhte, Ngente, Khawthring, Khiangte, Pantu, Rawite, Tenthlei, Thou, Vanghia and Zawngte. The Mizos came from the east

from Mokong valley and belong to Mongoloid stock and Kuki-chin tribes. Their dialects Tibeto-Burman family. Monogamy is the usual practice. Besides Mizos, the other tribes groups are Chakma, Kuki etc.

Mizos know the art of weaving. They also learnt the cotton cultivation in the past which was used for their dress. They know the art of dying, probably only one type *i.e.*, black dye. They know the art of basket making from bamboo and cane.

Arunachal Pradesh is composed of two mountain ranges, Himalayan and Patkoi. The allocation of the ranges encompasses heights from 4900 meters to 7000 meters. There are 110 tribal groups are inhabiting in this region out of 110 tribal groups only 14 are considered as the major tribal groups. They are Monpas Sherdukpens, Asas in Kameng district, Nishi/Bangnis, Apatanis, Apatami, Hiss Miri, Tagins, Mikirs in Subasiri district, Gallong Padam/Miniyongs in Siang district, Mishmis in Lohit district and Noctes, Wanchoes, Tangsas in Tirap district.

The main occupation of these tribes is agriculture mostly shifting hill cultivation, Magico-religious beliefs and practices have a predominant role in the religion of the majority of the tribes. The major tribes in Arunachal Pradesh speak languages belong to Tibeto-Burman group. The different tribal groups in this area are highly specializes in bamboo and cane work, wood carving and to some extent weaving. Pottery is little developed and confined to a few tribes. The pottery making in Arunachal Pradesh is the monopoly of the womenfolk. The art of iron



work is known almost all over the region. Dance and music have also reached a high standard in some of the tribes. The art of painting are only found among the tribal groups of western Kameng, who are Buddhist by religion. Poker work is also found in some tribes.

*Textile* : In North east India, spinning, dyeing and weaving are exclusively controlled by the female folk. In Arunachal Pradesh, previously the weaving is comparatively limited among the Adi, Mishmis, Apatani and the buddhist tribes. Textile patterns of these tribes are invariably geometric. Most popular motifs are diamond, zig-zag line and angular patterns. The floral and geomorphis patterns are more or less geometric form. Even now simple and straight lines, stripes and bands are the most common designs. Contrast and combination of colours are often made. They generally used vegetable dyes. The common colours are balck, yellow, dark blue, green scarlet and madder. Vegetable dye is obtained from the wood, bark leaves, shoots, wild flowers and fruits of certain plants. The hair of goat, dog and even monkey is sometimes used by the remoter tribes. So far as design is concerned 'Adis' and 'Apatanis' concentrate on straight lines. The Adis bands whether horizontal of vertical are often enhanced by a sort of hatching-rows of colour dots single lines of different colours. Different shades are achieved by mixing threads of black with other colours. The Apatani use broad bands alternating with narrow lines in their cloth. Another style of cloth is white with borders of blue mixed with red lines and a few vertical stripes of

red, green and white. Mishmi weaving is much more elaborate, though there to the straight line and band are frequent. The zig-zag pattern is only found in the Wanchoo bag. Herring bone designs are found in the shawl Apatani and in the Wanchoo and Mishmi coats. Lusenge and diamond patterns are found among the Idu Mishmi, they are woven on shawls, skirts, coats and bags. The Manpas are expert weavers. Monpa women weave in wool, cotton and bark fibre. They extract fibre from the Rheanivea and other plants. They have their own dye which gives them black and various shades of red and yellow. Beside textile the monpa women weave colourful carpets of dragon design on them.

In Nagaland cotton is grown in the villages on the lower hill sides. The cotton is seeded by a small wooden machine, which is manufactured by themselves. The spindle which spins out the seeded cotton is carled "themwu" and the loom is a simple kind of tension loom. The Nagas use dark blue, red and rarely yellow dye. The vegetable dye is obtained from leaves, shoot, bark of certain trees. The blue dye used by the Nagas varies from light blue to dark blue. The red dye is less used than the dark blue. One of the reason is that red colour being the colour of blood, a young woman using this colour in dye operation is believed to die or lose her head in a raid'. Yellow dye is used only by few tribes.

Naga women are very expert in getting the exact shades they prefer. The designs vary from a formal arrangment of lines to elaborate patterns of diamond and lezenge shape. Simple and straight forward lines



striped, squares and bands are the most traditional designs. On the skirt and shawls the stripes and bands are usually horizontal. In recent years familiar objects are often added to their original designs. Different sub-groups of the Nagas have different shawls of their own designs. Naga shawls range from very simple white cloth to the elaborately designed warrior or rich man's shawls. One of the common features of Nagas shawl is, that three pieces are woven separately and stitched together more or less the same pattern. In case of skirt for children and women the stripes are reduced to two only.

In Meghalaya the Garos weave their own cloth. Garo women manufacture mainly Dakmandas. The Dakmandas (2 meters  $\times$  1 meter) is a wrapper worn by womenfolk, beautifully decorated with their own indigenous designs, the colour schemes and various types of designs, like flowers, butterflies etc., are remarkable. Both the borders of the Dakmandas are decorated with three equal rows of diamond design spreading to a width of about  $1/3$  meter. Apart from "Dakmandas" they manufacture some other fabrics for their daily use. "Amfak" made of bark is still popular in the interior part of the Garo hills, stripes of barks of pharkam tree are taken out, these are pounded to make them stretched. These are then put in the sun. The bark sheets are then stitched to be used as blanket or as mattress. The Khasis and the Jaintia tribes had also certain original designs in handloom fabrics.

A form of textile found mainly in Khasi

hills is derived from pineapple fibre. These fibres are generally used for making bags.

The Mikir women folk are expert in weaving. The cotton generally grows in their field. They also know the art of manufacturing 'eri silk' and weave it into coarse fabrics or blanket used in cold weather. They dye their thread with indigo. They also know the use of red dye. In Assam the Kacharis know the culture of silk worm, known as eri and manufacture of eri cloth. The loom employed for weaving the 'eri silk' is of simple construction and the villagers themselves make it. The eri cloth is woven long stripes about 2 years wide. This fabric cloth is generally use in the cold seasons being soft and warm as well as remarkable strong and durable. They make geometric designs sometimes floral designs used by the Kachari women. The Monipuris are generally good weavers. The quality of the Monipuri cloths is still good. They generally use looms of loin type. They dye their cloths and yarns with the help of some plants and some varieties of clay. Many of the plants cultivated as dye crops. They are also expert in embroidered with silk. The designs of embroidery are flower, birds, animals etc. Indigenous textile pattern is invariable geometric in form.

*Poker work* : In North East Indian Poker work is only found in Nagaland, Meghalaya and Arunachal Pradesh. In Arunachal Pradesh this type of art is only found in a large scale among the 'Aka' tribes. They generally decorate the swords of weaving. Sheaths of Knives, pipes, combs, bangles and ear plug etc. This reveals some degree



of technical achievement and remarkable sense of pattern. The Membas and Tangamas of North Siang generally decorate the little bamboo holder of Jew's harps, simple poker works on bamboo are found in some Adi groups.

In Nagaland among Konyak and phom bamboo tobacco tubes are decorated with various designs by a sort of poker work. Chang also decorate their bamboo container with the help of poker work.

*Paintings* : In Arunachal Pradesh painting is limited to the Buddhist tribes only. The tribes are Monpa, Momba, Sherdukpen, etc. They depict the life of Buddhist sages inside the walls of monasteries and of chapels in houses and the inner ceiling of the domes of ceremonial gateways (Kakaling) with bright beautiful colours. Besides wall paintings, the Monpas, the Sherdukpens also paint designs from the Buddhist Mythology on their wooden bowls, cups, plates and low tables etc. Besides wood painting and wall painting, they paint on canvas and paper to depict moral themes as taught by Buddhism. Monpas also paint reed straps, which is used to produce different colourful designs on their baskets.

In Nagaland painting on cloths are practised only by the Lethas, Aos and Rengmas. Aos paint the white median band of their famous warrior shawl, "Tsongkotopsu", which can be worn only by one who had taken in war or had performed feasts of metir. The figure of elephant, tiger, mithun, cock, dao, spear and human heads are painted with black on the white median band. Painting is done by old men only.

They work free hand on the lines of thread. The same medium is used by the Rengmas.

Among the Buddhist tribes in Arunachal Pradesh paint is brought from Tibet and from plains of Assam. But the Nagas prepare their colour from the sap of a tree, which is mixed with very strong rice beer and the ash of that tree leaves.

*Wood Carving* : In Arunachal Pradesh and Nagaland a great deal of wood carvings are associated with religious beliefs and practices. The carvings on morang pillars are done on large posts among the tribes, namely Wanchoo, Noctes in Arunachal Pradesh and Nagas in the Nagaland. The art of carving wood is intimately connected with the practices of head hunting and morang institution (Bachelors' dormitory). The carvings on morang pillars are always in high relief, and since they are carved on large posts, they are fairly large in size. A post first roughly squared with a dao and at the same time the outline of the desired figure is first sketched with charcoal and the rest surface cut away sufficiently to leave a high relief. The figures are often coloured with soot and blood. Pillars are generally adorned with figures, like warrior with their guns, tigers, elephants, mithun heads, monkey/dogs, dancing couple etc. In Arunachal Pradesh, among the Wanchos the hornbill figure only be made in the chiefs morungs. Sometimes, human figures are prepared separately and attached to the pillars. In Nagaland the carvings of the southern and western tribes are usually inferior than that of the carvings of the eastern and northern tribes. Konyaks are the best wood carvers among the Nagas. Long drums of wooden



gongs in the morung is also a praise worthy craftsmanship. The long drum with an average dimension of thirty feet long and about 12 feet in girth made out from a single tree in the shape of dug out canoe. The front part of the gong is carved out a buffalo, mithun or tiger's head. The angamis and their southern neighbouring tribes have no such long drum but they gave similar importance to the carvings of the great solid wooden doors that defend the entrance of the village.

Among the Monpas and Sherdukpens, wood carving is highly developed. A great deal of carvings are associated with religious beliefs and practices. They have a large store of musks very graphically and colourfully carried out of wood to represent mythical characters in their traditional mimic dances. The musks are made out of single blocks of wood hollowed out inside.

Besides the carvings on the pillars, plank walls, and long drums, Nagas produce articles, such as utensils, rice pounding table. Smoking pipe, walking sticks, musical instruments. They also produce various sizes and patterns of wooden cups and plates. The most popular is a round four legged pattern from 15 cm. to 45 cm. in diameter and from 7 cm. to 30 cm. in height. The other patterns include one legged dish or a flat plate without legs. They also made several patterns of scabbards for their dao. The Wanchoos also produce some wooden dolls secular in character, like human figure male and female, frog, elephant etc. The Khamtis of Arunachal Pradesh are also good in wood carvings. Their wood carvings are the

part of the usual Buddhist style. But in one respect they stand away from 'Monpa' and 'Sherdukpens'. Their wooden dolls representing common scenes from Khamti life, such as "woman carrying water", man driving a plough, a dancer as well as comic pieces such as 'monkey pulling a buffalo by a rope' a 'similing tiger sitting on its haunches', are obviously meant for entertainment and not directly connected with the basic needs of life.

In Meghalayas, the Garos have produced good craftsmanship in wood carving, whether carved in relief or etched into the wood. The carvings done on their bachelors dormitory's main pillar bears their skills. The pillars are adorned with the figure of human beings, animals, fruits and vegetables. They also produce realistic figure carved on wood. The figure measuring around 6 inches to a feet in height usually depict a group of people whether going to market or showing a precession of tribal dances etc. The figures are draped by the Garo traditional costume and colour is painted in the figure where required.

The Khasis make betel leaf container from bamboo having designs etched around them. The designs are in most cases geometrical patterns. Sometimes bamboo cigarette holders are also etched in the same way for making them more attractive.

*Basketry and Mat work* : The bamboo and cane industry demonstrate a high grade of skill in almost all the tribes in north east India, cane and bamboo from the raw materials from which they meet the require-



ments of every day life from house building to making basket, fishing traps, construction of suspension bridges and religious paraphernalia etc.

In Arunachal Pradesh basketry, head gear and bands for different part of the body demonstrate a high grade skill with cane and bamboo. Baskets in this region are in different shape and sizes.

In Arunachal Pradesh three main varieties of technique are found throughout. The techniques are check, twilled and open hexagonal. Plaiting and twining techniques on the other hand are sparse and are generally used for making various appendages instead of basket proper. The open hexagonal technique is mostly adopted for the baskets intended for temporary use.

Another example of highly skilled basketry work is found among the 'Sherdukpens'. They make leak proof bottle for carrying rice beer with the help of fine cane straps.

Basket with structural ornamentation were found among the Adis, Apatanis, Nishis, Idu Mishmis and Noctes. Angular and cross pattern are frequent among the Adi basket, while diamond is the usual design among the Apatani and Mishmis. Straightline pattern is commonly found among Idu Mishmis, Digaru Mishmis, Miniyongs, Padams, Gallongs etc. Dyeing of cane, bamboo and reed splits are prevalent in Subansiri and Siang and Tirap districts. The Noctes and Wanchos use colour cane straps for their head gear, waist band, head band, armlet etc. The most common colour used are red black and yellow.

In Nagaland the making of basket is highly developed. Baskets are of all shaped and sizes from little receptacle to the carefully woven baskets. The materials used in basket making are the bamboo and cane. Three common patterns are found among the Nagas. The techniques are check, twilled and hexagonal as in Arunachal Pradesh. The conical shaped and semi conical shapes with rectangular base and cylindrical carrying baskets are common. The rim of the carrying basket may be strengthened by tying to an additional split of cane. Sometimes additional splits are added at regular intervals in conical carrying basket to widen the upper portion.

Besides basket they also manufacture beautiful hats, caskets, cups, shields, and musical instruments like flute and Jew's harp from bamboo and cane stripes. They are expert in dyeing of cane bamboo stripes. They use colour cane and bamboo straps for their head gear, waist band, head band etc.

In Meghalaya both Khasis and Garos are expert basket makers. They make different form and sizes of baskets. Among the Khasis conical carrying baskets, semi conical carrying baskets with rectangular base, flar basket and plates are common. They also produce cylindrical basket of large size for the storing of paddy. Small basket with constricted mouth is also common. Among the Garos the most common baskets are conical shaped square based carrying basket, square based small basket (don) and round and rectangular shaped winnowing fans. The common technique of making baskets in Meghalaya are check, twilled and



open hexagonal. Structural ornamentation is also found in the baskets. The designs always have a chequered and geomatrical form. Both the tribes know the art of dyeing. The colour they generally use are black and pink. Some of the most common baskets are lidrembaskets known as "Ka trop" in Khasi hills, 'Megamkok' in Garo hills, the 'Koochet' basket of Jaintia hills the 'Khara' basket of Garo hills etc.

The tribes of Assam, Manipur, Mizoram and Tripura are also expert in basket making from bamboo and cane. The most common types of basket found among the Kacharis are semi conical square based carrying basket, large and small, hexagonal carrying basket — strongly built, round rectangular based basket and flat circular plates like the other state of north east India. The tribes of the 4 states also followed more or less the same technique in basket making i.e. check, twilled and open hexagonal.

Two varieties of mating are found in the region. One diagonally worked at one corner in check and twill technique and other worked horizontally in which the wrap are arranged parallel to each other and the weft are inserted successively.

*Decoration and personal adornments :* Tattooing, sacrification, multilation, knocking out and filing the teeth and painting the body with native dyes are considered as beauty aids, among some tribal groups. In Arunachal Pradesh the art of tattooing is found among the Wanchos, Noctos, Apatani, Aka, Singphos, Miniyongs, etc. But the motifs behind the tattooing vary from tribe to tribe. Among the Wanchos the tat-

too marks signify the rank of the man in the society and for women the different stages of her life besides the motif of personal decoration. A person from the chief's family tattoo his body with elaborate designs, whereas the commoners have simpler ones. Men make tattoo marks on face, chest, back of the body and the neck. Where as women make them on chest, arms, thighs, back of the shoulder. The designs for the men are usually broad spectacle on the face and feather designs on the chest and back of the body. In olden days when head hunting was in practice tattoo marks on the body of the man represented the bravery and consequently the social status of the man. Girls are first tattooed on their unbilious with design of plus sign at the time of bethrothal or prior to it. Then on attaining puberty girl tattoos her calf muscles with design on circular line surrounding the calf muscles with zig-zag or diamond patterns. She is tattooed again before going to husband's house on thigh with straight horizontal lines. The last phase of tattooing of a girl takes place when she 1st conceive with broad "M" on her chest. Among the Noctes the tattoo in case of women is a social obligation. They tattooing on their face, diamond patterns with cross lines joining the cones. Among the Apatani, Aka, Singphos and Miniyong, tattooing is done probably to beautify them. The male Apatanis have only tattoos below lips a horizontal line is drawn below lip and a straight line is drawn from it to the point of the chin. The women are tattooed with band and blue line from the top of the forehead to the tip of the nose and from the low lip to the base of the chin. They also tattoo



in different parts of the body. Tattooing is common among the Aka women, who inscribe a straight line on her face, running from below the forehead to the chin where it bifurcates. All the married Singphos women are tattooed in both legs from the ankle to knee, in broad parallel bands. In Assam among the Mikir women attaining puberty, usually tattoo a perpendicular line with indigo down from middle of the forehead, the nose upper lip and chin or other parts of the body. Men do not have any tattoo mark in their body. Sherdukpens do not know the art of tattooing. But women and sometimes children use a paste called "bachichlong" which is a black sticky substance prepared out of pine resin and charcoal dust on their lips and also draw some geometrical designs on their cheeks. Aka women also use some type of paste besides tattooing Wanchoo and Nocte, man and woman apply a type of black juice on their teeth probably to beautify them.

The materials chiefly used by different tribal groups for personal decoration are shell, ivory, boar's tusks, heads of agate and other pebbles, goats hair dyed scarlet and the other scarlet and the other colours brass and glass. All the tribes use hair goats' hair, dogs' hair and human hair for decoration purposes. No one will even part with a dao or basket adorned with human hair. The Adis decorate their huts with the fur of bears and other animals. The Semas and other tribes of Nagaland use human hair for their tails of basket work and a circlet of bear's fur is worn round the head with horn-bill feathers, according to number of heads taken. All the Tuensand tribes deco-

rate their huts with hair and wooden figures. Cowries are often used. Akas use them on their 'sashas', the 'Boris' and 'Ashings' on their belt, the phoms and changs have a broad cowrie belt. The Konyak decorate textile with the cowries. Angami are very fond of wearing something on their ears. This was not necessarily of any kind of ear ring or plug but something unusual, like cog-wheel of a waten, piece of balck wool or pieces of red paper or cloth.

Sometimes wooden piece and cane are used to beautify them. Apatani women use large cane nose plugs in both nostrils. The most distinctive features of male Apatani attire is the famous Apatani tail a special belt made of strands of split cane which fits round the body and hands down behind. Among the Dafla the anklet of women are surrounded in tight fitting cane garters.

Besides the above mentioned materials chiefly used by the different groups, other materials such as ivory polished wood strings of conch shells and beads, black seeds for ear ornaments etc., are also used by different groups for their personal adornment.

*Dress and Ornament* : Dress and Ornament worn by different tribal groups in this region varies from tribe to tribe. These are classified as religious ceremonial and secular. The use of certain kind of dress and ornaments, depend on social position and achievements of the person. In Arunachal Pradesh among some Adi groups and the Idu Mishmis the priests' ceremonial dresses are very elaborate and decorative. A special kind of apron woven in black, white, yel-



low and orange, worn by the Shames of Idu Mishmis on ceremonial occasions along with decorative belts and necklace made up of tiger, pig and monkeys' teeth and claws together with a head band of plaited cane, decorated with cowries and coloured feathers. Apatani priest can only wear a special shawl on ceremonial occasions and so forth. Among the Nagas of Nagaland a special kind shawl can only be worn by the priest. Almost every Naga groups have a special kind of decorative shawl in this respect. Among the Adis, unmarried girls wear one type of belt, married women wear another. Among the Sherdukpens aristocracy is known to wear the Tibetan krobed hat only. The Wanchos allow only members of the shief familiers to wear a certain type of blue bead on the arms and legs. Among the Garos the village headman can only entitled to wear a special kind of brass or silver elbow ring, known as "Jacksil". In Nagaland, among the Nagas certain kind of shawl and skirt can only be worn by a person who has taken heads in war or offered a feast of merit. The Ao Nagas warrior shawl "Tsongkotopsu" is a special kind of shawl can be worn only by the person who has taken heads or offered a feast of merit. "Rangon" is another most decorative shawl can be worn by a man whose grandfather and father have both done the feast of merit and who has done it himself. The daughter of a man who has done the feast of merit wear a skirt more elaborate than that of the daughter of common man, and the skirt of the wife of that man is heavily ornamented than that of other common man's wife and so forth. It is impossible to describe all the

varieties of shawl and skirt found in different Naga groups, because they vary not only among the different tribal groups but also vary among the same tribe, from village to village, phratry and even clan to clan in the same village.

In Manipur the Meithes, old rulers imposed some restrictions regarding dress and ornaments. For example, a silk dhoti with purple patterns or orange colour can be worn only by the princes and sons-in-law of the king and not by persons of inferior rank. A red or pink dhoti can be worn in presence of the ruler only by privileged persons of inferior rank. A red or pink dhoti can be worn in presence of the ruler only by privileged persons, the women cannot wear gold embroidered wrapper in the presence of the king.

The general dress of Sherdukpens men is a piece of cloth, locally known as 'sape', diagonally covers the upper part of their bodies. The cloth is about  $2\frac{1}{2}$  yards in length and  $1\frac{1}{2}$  yards in width. The two ends of the border are pinned on the shoulders. This garment is sleeveless and reaches up to knees. A full sleeved jacket, reaching below hips is worn over the 'sape'. For head gear they generally use black felt skull cap, made from yak's hair. A sash of thick coloured handloom cloth, with decorated borders, six to eight feet long and 11 to 12 inches wide is wrapped round the waist. Women dress themselves in loose, collarless and sleeveless skirt, which cover the body from shoulder to knees. They also tie a coloured sash like man. Both the sexes wear head necklaces around their necks. Women



generally wear a good number of different varieties of bead necklaces. They wear bangles and rings, made locally by melting silver coins. They also wear silver locket or brooches.

The dresses of Nishi and Apatani are to some extent similar, the lower garment of a man consist of a lion cloth reaching half way to the thighs. A piece of cotton or woolen cloth is spread over the shoulders. The traditional garment border or stripes design. They also use the same type of cloth as in man as upper garment. Besides cloth the Nishi men wear round the waist carefully woven bands of cane. They have a cane band round the legs just below the knees. Both the sexes wear bamboo or brass war rings. On festivals the women wear a head band of small metal and little bell like ear rings. Some are still using the belt of a leather band to which are attached a number of brass plates about 3 inches in diameter, which may be compared with the Adi 'beyop'. Apatani women use a very large rings in their ears. The Adi 'beyop' as described by Dalton. "All female wear around their waist in a row from three to a dozen shell shaped plates of bell-metal from about six to three inches in diameter, the largest in the middle the others gradually diminishing in size as they approach the hips.

The Hill Miri male, uses in their shoulders a "knapsack" of square size, made of cane and covered by a kind of short cloak made from palm tree fibre. They also have cane helmet as Nishis. The women's dress consist of a short petticoat extending from loins to the knows and is fixed to a broad

belt of leather often ornamented with brass bosses. The upper garment consists of a band of plaited cane work girding the body close under the arm and from this in front arrangement of cloth suspended and cover the breasts. The women have bracelets of silver or copper and anklets of finely plaited cane. In the ears, they wear most fantastic ornaments of silver. They wear round their neck an enormous quantity of necklaces made from porcelain, beads of agate, cornslian and ordinary glass beads. Among the Digaru and Miju Mishmi the male dress consists of sleeveless coat of black or maroon colour with ornamental borders and a strip of waist cloth with an embroidered flap in the front. The head dress is a carefully woven cane hat. The women wear black skirts, sometimes with coloured stripes reaching above the ankles, a beautifully embroidered bodies and a shawl. A colourful piece of cloth over the skirt is also worn by the women. They are very fond of ornaments — they wear a thin silver plate round the forehead for decoration, silver earring, necklace made of silver coins and beads. Idu Mishmi men wear thick coats, black with white pattern made of nettle fibre and human hair, which serves as defensive covering against the thrust of an arrow. The dress of woman consists of a loose fitting bodice and a striped or coloured cloth fastened round the waist, which extends to the knees. The Wanchos are not very fond of cloths, but they wear splendid ornaments of ivory, hornsells, beads of different colours. With the help of beads they made head band, wrist band, neck band, necklace with ornamental designs.



In Meghalaya, among the Khasis, the male dress consists of a sleeveless coat, with a fringe at the bottom and a row of tassels across the chest. The head wear is a cap with ear flaps or a white turban. The women wore a piece of cloth called 'Ka Jympien' fastened to the loins by a cloth belt. Over this a long piece of cloth hanging loosely from the shoulders, down to a little above the ankles. Over this they wear a sort of cloak of gray colour. A wrapper, either white or bright colour east round the head and shoulders.

Both men and women wear earring and silver chains. The men wear the chains round their waist like a belt and women hang them round the neck. The women are fond of gold and coral bead necklaces. An ornament, called 'Ka Pansngiat' of silver and gold crown with tassels of the same metal hanging down the back, worn by young women during dances. 'Rupa tylli' or silver collar — a broad flat, silver collar hanging down from the neck. Gold and silver bracelet are also worn. Yngam women wear so many brass ear rings on their earlobes.

The lower garment worn by the Garo male is usually a blue cloth with stripes of red. On the head Garos wear a turban of dark blue or white cotton cloth. During winter they put a cotton cloth or blanket over their shoulders. The women's main garment is the 'riking' which is just enough to encircle the waist. It is fastened on the top with two stripes and leaves the thighs bare. Both the sexes wear ornament. The man wears two kinds of brass earrings.

Those worn in the lobe are called "nodogbi" or "otonga" and as many as thirty one worn in each ear. In the upper part of the ear they wear a very small brass ring called 'nadirong'. Both the sexes wear necklaces with barrel shaped red beads. Women wear brass rings called 'shishas' in their ears but heavier and large in size. Often more than fifty rings are worn in each ear. Brass and bronze bracelet too are worn.

In Mizoram, the dress of Mizo woman's is consist of a skirt called 'siapsuap', a small piece of broad cloth woven from the reeds of the bark of trees. More than one piece would be worn together fixed round the waist reaching only above the knees. Man use a kind of cloth known as 'hnawkhol' made of same materials as in women but in longer size. It was used to cover the upper part of the body to protect him from cold. This was subsequently replaced by an ordinary cotton cloth. Later another piece of cloth of greater breadth and just sufficient in length to go round the body of a grown up woman. The cloth is black in colour with embroidery of white thread. Ornaments were worn by men and women.

In Assam Mikir men wear a dhoti of cotton or silk. The coat is a sleeveless striped jacket with a long fringe behind. A thick wrapper called "barkapar" is worn in the cold weather. On the head they wear cap of black and red cloth or a turban. The women wear a petticoat of white cloth with red stripes, fixed round the waist by an ornamental girdle. The upper garment is a wrapper drawn under the arms and slightly lacing the breasts. They wore necklaces of



gold, silver and coral beads. The ear ornament is a large silver tube inserted into the lobes of the ear.

In Manipur, the Meities wear a dhoti and shirt. Turban is almost inseparable part of the dress. The women wear a kind of lower garment called 'phanok'. For the upper part of the body they use blouse and a sheet of coloured cloth, round the body. Women use necklaces, rings and bracelets. Ornaments are made of gold or silver.

It is important to note that with the ever increasing impact of the outside world, the dresses of the tribal people are in a process of change.

In north east India Poker work, paintings and wood carvings are found mainly in Arunachal Pradesh and Nagaland. Of course among the Garos and Khasis of Meghalaya wood carvings and bamboo are marked. The textile and basketry are found among all the tribes of this area. In Arunachal Pradesh amongst the 'Wanchoos' tattooing is done not only for decorating purposes but to signify anybody's social status and also of different stages of life.

Now-a-days almost every village in this area is being connected by roads. Communication with towns and cities are becoming much easier. As a result, people from interior villages have started coming to these areas very frequently. Formally they prepared their day-to-day requirements only for themselves and they were restricted to their won designs etc. But now due to the communication facility they have started

going to town and felt the necessity of many modern things, which were not known to them early. As a result, they are now interested in cash money to fill their satisfaction. To get cash money, they have started selling their home made products to outsiders. So they have started preparing their home made products according to the satisfaction of their customers. The taste of outsider they study when they go to town etc. Moreover, now-a-days almost in all area craft centre is there where they are taught to prepare things in modern way with modern designs.

Now due to contact situation and assimilation of culture the traditional customs and beliefs of the tribal people are in changing situation, eventually the old art may also be subjected to continuous transformation and decay. Traditional art objects have been losing their traditional meaning to the new generations. Tribal art objects their designs and patterns and values that belong to a time and pattern of culture, that is given away to the new values and order. The impact of urbanisation and industrialisation on the tribal art objects is quite evident in north eastern India. The art is changing incorporating many new ideas, style and form. A time is not far when their artistic tradition will disappear completely, without leaving any trace. At this stage speedy scientific documentation of these dying cultural heritage is very urgent and revival and retrieval of those dying tribal art, must be considered as national problem.



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# MUSIC AS A CONTEXTUAL COMPONENT OF A MUSEUM/ARCHIVE

Sisir Kumar Mukherjee

## Introduction

The previous centuries of human civilisation saw the gradually emerging trends of man's urge for collecting and storing different kinds of products of man and nature. This universal urge did not fail to impress Elias Ashmole to collect and preserve whatever he got from various parts of the globe. Thus the Ashmolean Museum came into being in 1683, the first in the series of Museum Movement, followed by the British Museum, seventy years later.

On the Indian soil, a great occidental Indologist of high academic acumen, Sir William Jones, came with the uncommon foresight of collecting and preserving the different products or 'Man and nature', who showed the path of founding Asia's first Museum and Archive, viz. The Asiatic Society in 1784. Gradual expansion of such ideas of conservation has been tempting, throughout the long years, followed by, the scholars to found different types and natures of Museums and Archives, now considered as centres of education and information.

In the context of prophetic versions of the pioneer Museologists of the preceeding years and centuries, policy-makers of ICOM were wise enough to define Museum as, "a non-profit making, permanent institution in the service of society and of its development, and open to the public which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment."<sup>1</sup>

As music is one of the basic instincts of human feelings, its evidence, along with various associates of instruments, is found in many facets and stages of man's civilisation, irrespective of media, viz. stones, palm-leaves, papers, paintings and what not. According to Taborsky Enduring, "Myths, poetry, songs, stories, dance, rituals, religion, social rites, kinship structures are all strong systems which have provided societies with such services."<sup>2</sup>

## Collection :

Thus we see, in almost all museum or archives in the world, music or musical instruments, in various forms of iconography



or manuscripts, which are in store for display and education. The Violin of Antonio Stradiari (1644?-1737) at the Ashmolean Museum of Oxford, Damaru on the right lower arm of the four-armed bronze Nataraja of India, c. 1100 A.D. at the British Museum, London, Violin, used by Barak Norman, London, 1692 and a large sized Bin (Mahati Vina), North India, used by Sir Sourindra Mohun Tagore, both at the Royal College of Music Museum of Instruments, London, Sankha (Conch) on the lower right hand of 4-armed bronze Vishnu, Damaru on upper right hand of 4-armed bronze Siva, both at the Indian collection of the Boston Museum of Fine Arts, U.S.A., a Tambour (Drum) on upper right hand of 4-armed bronze Shiva Tandava at the Musée Guimet, Paris, all are in tune with other museum objects, as products of man, meant for dissemination of knowledge.

Cynthia Adams Hoover, the then Chairperson of CIMCIM was justified in observing as, "...collecting, conservation, exhibition, and interpretation of our collective heritage for current and future generations..."<sup>3</sup> Regarding the role of musical instruments "A musical instrument is any sound-producing device from any culture, activating in any way that is used for making what is commonly called 'music' (CIMCIM Directory, International Directory of Musical Instruments)."<sup>4</sup>

Besides the objects of musical instruments on stone or terracotta, such musical instruments were also executed on manuscripts and miniature paintings, as preserved at different museums of the world.

We can see Veen on the hands of Saraswati, the Goddess of Learning, in the Sanskrit manuscript, "Vivekapanchamrita" of 1794 A.D. and on others, with other musical manuscripts, as preserved at the Asiatic Society, Calcutta. Its enormous collection contains about 50,000 such manuscripts, written in Sanskrit, Bengali, Pali, Newari etc., though not all contain any musical instruments.

Founded in 1892 in Calcutta, Bangiya Sahitya Parishad (Bengali Literary Society), with a prophetic vision of collecting and preserving different materials of archival nature, viz. manuscripts, first edition books, sculptures, paintings, has now a magnificent collection of manuscripts of lyrical relevance, based on religions of different faiths, viz. Sri Krishna Kirtan, Padma Puran, Krishna Mangal, Manasha Mangal, Kalika Mangal, Sri Krishna Mangal, Durga Mangal and other books of verses. Apart from musical contents, references of musical instruments too can be found therein. Executed in the mediaeval period on paper and palm-leaf and written in Sanskrit, Bengali, Pali etc., their number figures to about 10,000, but exhibition on thematic manner, has yet to be achieved to highlight their rich and potential research contents for showing the then musical genres.

Collection of musical instruments at the Indian Museum, Calcutta is on display at a gallery, called as Musical Instruments Gallery, which shows a bulk of such objects, once used by Sir Sourindra Mohun Tagore and later donated to the Indian Museum, some 100 years back. The collection of Sir



Tagore, a great Musicologist includes Sitar, Mayurvina, Esraj, Vipanchivina, Mahakacchapivina, of the Tata Vadya family, Huruk, Dhamsa, Tamuka, Tambourine, Trumpet, Damaru, Chang, Drum of the Anaddha Vacya family, Singa, Gouri Sankha, Senai, Flute of the Sushira Vadya family and Bell, Brass, Cymbal of the Ghana Vadya family — only to name a few. But proper display, according to the principles of classification by Bharata's 'Natyasastra' and the larger labels near the viewers' eyes are yet to be done. Demonstration of Video Shows on short-circuit screen, placed at one corner of the Gallery too does not cover the relevant instruments, in particular, on view, but the musical feats of the Tribal people, without taking the instruments into account. On the contrary, the low sounded audio cassettes of Cafela songs of the deserts at the Arab Corner of the Ethnological Gallery of the British Museum, London and the video shows on typical marriage festivals of Rajasthan, Gujarat, Bengal at the Indian Collection of the Victoria & Albert Museum, London, offer the best solution in creating a complementary effect to the objects on view. (During my visit to London in 1991, I was amazed to enjoy the unique techniques, as these were able to make me and others forget that we were in London.)

#### Exhibition :

That, exhibition can help build up the nucleus of a Museum, is true in the case of the National Museum at New Delhi. An exhibition of Indian Art was held at Burlington House, London in 1947-48 under the auspices of the Royal Academy of Arts,

where, besides objects of Arts and Archaeology of Indian origin, invaluable paintings on Raagamala series featured most. The distinctive feature of the Indian Music system is in the codification of Raagas and Raaginis, *i.e.* rhythm, melody and mood, as was propounded by Bharata, the great Musicologist of c. 200 B.C. These Raagas and Raaginis are based on different seasons of the year, different sequences and different moods, *viz.*, sorrow, joy, fear, ecstasy etc. These art objects, including Raagamala paintings, were brought to India in 1950, with which, the National Museum was born on 15.8.1950. These paintings belong to different schools, *viz.* Western Indian, Deccani, Rajasthani and Mughal. Apart from expressing the respective Raagas and Raaginis, some of them shows Flute, Mridanga, Cymbals, Nay, Vina etc. along with some flora and fauna. These paintings, executed under the then royal patronages, by Persian and Indian painters in the mediaeval period, having base on the stories of the Ramayana, Mahabharata, and other epics, show vibrance, lustre and serenity in different colours. Paintings of the Mughal School, taken from the illustrated manuscript Diaries of the ruling monarchs, depict various types of musical instruments, used by the Court musicians, royal huntings, royal birth ceremonies and some religious feats.

The best way of twinning the musical objects with the presentation of performing arts was achieved by the Sangeet Natak Akademy, the Govt. Music Archive of India to commemorate 50th Anniversary of India's Independence, called as 'Swarna



Samaroha' (Golden Celebration). It was started in New Delhi on 15.8.97., continuing to 31.8.97., followed by celebrations at Chennai from 3.9.97 to 13.9.97, Calcutta from 16.9.97 to 25.9.97 and Mumbai from 13.10.97 to 21.10.97. Music and Dance programmes on Hindustani Classical of North India and the Carnatic Classical of South India were held with both Vocal and Instrumental renderings. Simultaneous exhibitions on Art and Sculptural objects, having musical relevance, from the collections of the respective National Museums of those cities, were held at the concerned National Museums, viz. National Museum, New Delhi, Govt. Museum, Chennai, Indian Museum, Calcutta and the Prince of Wales Museum, Mumbai respectively during the above periods. Performances by Artistes of eminence were done on Shenai, Carnatic Flute, Hindustani Flute, Mandoline of the Sushira Vadya family, Violin, Santoor, Sitar, Sarod, Guitar, Sarangi of the Tata Vadya family, Mridangam, Tabla, Pakhawaj, Ghatam, Nad of the Anaddha Vadya family. Indian Classical Dances viz. Mohiniatyam, Bharatnatyam, Kathak, Kuchipuri, Manipuri, Odissi were also performed by the concerned exponents of the country.

The 10-day long exhibition on Indian art and sculpture, as a contextual component was entitled as "Exhibition on Rhythm and Melody in Indian Art", held at the Indian Museum, Calcutta during the period. On the sculptures, mention may be made of: Dancing Girl of Mohenjodaro on terracotta (3rd Mil. B.C.), Playing of musical instruments of Gandhara (2nd cent.

A.D.) on stone, Dance of Nymphs on stone of Bharhut (2nd cent. B.C.), Conch-blower on stone of Mathura, Kushana period (2nd cent. A.D.), Beating of Damaru on terracotta of Maynamati, Bangladesh (4th cent. A.D.), Snake-headed male playing on Cymbals on terracotta of Paharpur, Bangladesh (9th cent. A.D.), Lyre with Samudra Gupta on Golden coin (Gupta period, 4th cent. A.D.), Dwarapala on stone, Pala period (10th cent. A.D.), Krishna, dancing with Flute on brass, inlaid, Madras (19th cent. A.D.), Ladies, playing on Tambourine on terracotta, Bengal (17th cent. A.D.), Krishna, playing on Flute on terracotta, Murshidabad (15th cent. A.D.), Dancing Ganesha on stone, Pala period, Dinajpur, W. Bengal (c. 12th cent. A.D.).

The paintings, as exhibited at the Indian Museum, during this period were all based on Raagamala series, belonging to Mughal, Rajasthani, Pahari, Deccani, East India Company and Bengal School. They included: Countryside Musician (Mughal, 1612 A.D.), Line drawing of Emperor Jehangir and Tansen (Mughal, 17th C.A.D.), Lady, listening to music (Deccani, 1725-1740 A.D.), Lady, playing on Vina (Deccani, c. 18th C.A.D.), Raaga Hindol (c. 1760 A.D.), Raaga Kedara (Deccani, c. 18th C.A.D.), Raaga Bhairabi (Raj. c. 18th C. A.D.), Raagini Todi (Dec. c. 18th C. A.D.), Raagini Ashavari (Hyderabad c. 1750 A.D.), Raagini Devganthar (Raj. c. 1770 A.D.). Painting of Mirabai, the famous legendary musician and a devotee to Lord Krishna (Raj. c. 19th C. A.D.) was also on display. This exhibition added a new dimension to the concept of Museology with Musicology.



The subsequent presentation of old manuscripts and books was held at the Indian Museum in June, 1998, media being leaves, wooden barks, bamboo chips and metals. The manuscripts covered Hindu, Buddhist and Jaina iconographies in Sanskrit, Parsian, Arabic and Bengali languages, ranging from 6th to 20th C. A.D. On the illustrations of some manuscripts, Vina, Bell, Cymbals etc. were depicted though the exhibition was not thematically titled as the former one.

In order to complement the visual images of miniatures of the Raagamala series with corresponding representations, a bit more plausible approach was experimented by me, while presenting a 'Paper'<sup>5</sup> at Helsingor in Denmark in 1995, through audio-visual techniques. Slide shows of Raagamala paintings on Bhairabi (of Malwa School), used for sunrise sequence, were complemented with the playing of audio cassette on Sehnaï by Bismilla Khan and on Sitar by Bilayet Khan, that of Todi (Raj. School), for pre-sunrise sequence, with the playing on Sehnaï by Bismilla Khan and Sitar by Bilayet Khan, that on Kanara (Raj. School), for deep night, with the playing on Flute by Pannalal Ghosh, that of Malkosh (Malwa School) for deep night, with the playing on Sitar by Nikhil Banerjee, that of Sri Raaga (Raj. School), for Winter, with the playing on Sitar by Ravi Shankar and on Sarod by Ali Akbar, while some more slides were presented on Purabi (Deccani School) for evening, Deepak (Raj. School) for Summer, Hindol (Raj. School) for Spring etc. The identical presentation was made by me at Bhubaneswar in 1997, while tabling a 'Pa-

per'<sup>6</sup> at the Annual Session of the Indian Art History Congress.

In view of growing dependability on electronic media, for obvious reasons however, it can be suggested that deep research-oriented multimedia programmes can lead to the preparation of CD-ROMs on Raagamala paintings, with digital photos and audios, with all academic informations. This will help to study the objects, under project, in all related details in the context of musical moods and musical instruments, besides flora, fauna and other social events with royal pomp, grandeur, so that the proposed researches can get more transparency, besides proposed conservation. For the present, however, separate key boards can be prepared for individual Raagamala paintings, which can offer, by pushing buttons, the audios of the relevant Raagas and Raaginis on voice and on musical instruments on view, as also the sounds of the animals and birds. This audiovisual programme can bring more meaning to the exhibits. This unique suggestion was made to Dr. Shyamal Chakravorti, Director, Indian Museum, who agreed to say that it was under their consideration.

#### Outreach Programmes :

"Sampradaya", the only Music Archive, in the true sense, in India, was established in 1982 with the financial assistance of Ford Foundation, purely committed to the preservation and conservation of Karnatic Music of South India. Starting with a collection of 300 hours of recorded music, it now holds about 15,000 hours of music on tape and disc records. Indoor programmes, apart,



on recordings and collections, it has highly academic outreach programmes, through which, recordings on performances of Mridangam, Vina, Violin, Flute, Tamboura, Bowel instruments, Plucked instruments, Harmonium, besides vocal renderings, all by eminent exponents. Even a lot of folk songs, music at temples and religious festivals, has been collected from Bali, Indonesia, Sumatra and the Far East. Tamil Musical Dramas, along with accompanying music, Classical Dance Music, Theatrical Music have also been collected through outreach programmes and preserved with proper documentation.

Gurusaday Museum was founded in Calcutta in 1984 with the personal collection of Sir Gurusaday Dutta (1882-1941), a former bureaucrat and an Indologist. Collections cover objects on rural folks and rustic arts, reflecting the vitality of the rural life, social traditions religious beliefs, motifs on 'Kanthas' (cotton winter covers, sewn by hands), terracotta panels, illustrated manuscripts, 'Dasavatara Cards', Scrolls, Square Patas (painted paper or cloth), 'Kalighat Patas', Sculptures of the Pala Sena periods (10th to 12th C. A.D.), wooden carvings, Moulds, Dolls, Toys, Potteries. An outreach programme on exhibition was held at the Indian Museum, very recently, which covered only the 'Chitrapatas', showing Narada with Veena, Dhole in a festive dance, Flute, Dhole, Drum, Kansar (Cymbal) in a marriage procession, Saraswati with Veena, Ganesha with Conch, Khols, Cymbals in a devotional procession, Krishna with Flute, a Musician with a Tanpura etc. As the concept of Music Documentation is yet to find

a place, thematic exhibition, purely on Musical instruments has yet to find favour in the Organisers' minds.

Research Archives for Japanese Music in Ueno Gakuen College in Tokyo, established in 1973 as a centre for historical research on Japanese music, showed the way of highlighting traditional Japanese musical instruments, Royal Diaries, musical notations through outreach programmes. They are in the process of collecting of materials, surveys and research projects. The collections include Tenpyoo Biwa-fu, oldest example of music notation (dating from or before the 7th month of 747 A.D.), Instrumental tablature notations including Sango Yooroku and Jinchi Yooroku (both pre-1992 A.D.), for both stringed and wind instruments, Shoomyooshuu, a Kooya-ban edition, the oldest dated example of printed music notation of Buddhist Chant of 1472 A.D., Diaries of the Court Nobles, surviving from the mid-ninth century A.D., first standard collection of music notations for Transverse Flute, viz. Shinsen Oojoo-fu under the order of Prince Sadayasu (870-924 A.D.), record of appointments of Musicians, viz. Gakunin Bunin of the 12th and 13th centuries and other documentary evidences of Japanese music and instruments.

An exhibition to highlight traditional Japanese music notation was held in the Japan House Gallery, New York in 1981, entitled, "Sound on Paper : Music Notation in Japan". Later in 1986, they held in exhibition of Shoomyoo-related materials, called as "Musik und Zeichnen : Notation buddhistischer Gesänge Japans



Schreftquellon des 11-19 in the Museum für Ostasiatische Kunst at Köln. In the same year, an International Symposium, *viz.* "Music and Philology" was held in collaboration with the Musikwissenschaftliches Institut of the Universität zu Köln. These have opened the eyes of international scholars to be aware of the depth and devotion of the Japanese counterparts, as also of the rich heritage of Japanese Music Disciplines.<sup>7</sup>

In the area of outreach programmes, the Indian Museum, Calcutta took the lead by holding an Inter-State Exhibition to show Bengal Art at the Salar Jung Museum at Hyderabad in August, 1998. Temple terracotta of women, playing a Tambourin, Snake-headed male, playing Cymbals, on terracotta, Male Drum player on paper by Jamini Roy and other music-related objects were shown there, along with other objects of Art and sculpture. Outreach programmes on inter-continental basis were found in India, when Indian heritage art objects of the Museum of Indian Art, Berlin were brought from Germany and exhibited at the National Museum, New Delhi from 14.8.98 to 30.9.98, at the Indian Museum, Calcutta from 15.10.98 to 15.11.98 and at the National Gallery of Modern Art, Mumbai from 3.12.98 to 3.1.99. The exhibition, entitled as "Treasure of Indian Art : Germany's Tribute to India's Cultural Heritage", covers works of art, manuscripts and documents, housed in the said Museum, ranging from 2nd Mil. B.C. to 18th C. A.D. On one painting of the Raagamala series on Vasanta Raagini (Raj. Bundi col., early 17th C. A.D.), Lord Krishna is found with Veena, one Gopi with Flute, one Gopi with Mridanga, one with Cymbal,

on the arch of a door (Raj. 11th C. A.D.), 2 Damarus, 3 Drums, 2 large Flutes are found ; Damaru is also found on right upper hand of Shiva on grey sandstone (Raj. 105h C. A.D.), though not fully shown on musical relevance. In this project, another exhibition was held by the Indian Museum in South Korea in January 1998 with the art objects of the former, though not projecting music alone.

#### Application of Science and Technology :

Sangeet Research Academy, set up in Calcutta in 1978 by the Imperial Tobacco Company as a Public Charitable Trust, has an aim to create inheritors for the country's classical Hindustani music tradition through 'Gurukul' system and to enrich traditional methods of training and performance through research, documentation and rationalisation. For this, they have already built up an updated Music Archive with recordings and performances, conducted at the training centre. They have a highly sophisticated Musical Acoustic Research Library to study Hindustani Music in vocal and instrumental aspects. In the laboratory, they have audiometric facilities to study sound pressure, sounds of vocal and instrumental music, the use of microtones, the systematic study of acoustic properties of string instruments and so on, *i.e.* studies in all scientific aspects through electronic media.

#### Museum Marketing :

A new concept has crept in the minds of the museum officials to raise funds for the welfare of their museums. This concept of Museum Marketing has tempted the In-



dian Museum, having objects of cosmopolitan nature, to hold Sarod recitals by Ustad Ali Akbar in March, 1997. As music fits well as a contextual component in the Indian Museum, they deserve credit in this regard. But the picture is different at the Victoria Memorial in Calcutta, established in 1914, with a view to project objects, mainly on colonial nature. There, musical programmes, to commemorate the Bengali New Year, were held in May, 1997. Classical dance recitals by famous dancers were held in October, 1993 and again in November, 1994, an Antiquity Festival was held with noteworthy dance exponents. Music and Musical instruments have yet to illuminate the 'Memorial'.

#### Extra Mural Activities :

The Lo-School of Elsinor, the venue of the 17th Congress of the International Association of Music Libraries and Documentation Centres (IAML) in 1995 witnessed a unique exhibition of a large Sounding Sculpture called as turning point of the Central Library, invented by William Louis Sorensen. In the park of the Library, near the venue of the Congress Session, the said sculpture was built in 3 parts—a String Instrument, a Tube and a Membrane Instrument, which, after electronic amplification, was heard at the Library and also at the Congress venue. This reminds me as most contextual, in respect of events, contents and performances, when International Harp Week was observed with Concerts and Musical events in West Berlin in 1988 at the Annual General Meeting of CIMCIM<sup>8</sup> and the demonstration of Pipers was held at the

Chantry Bagpipe Museum at Morpeth, near Castle, in 1994 on the occasion of Annual Conference of CIMCIM.<sup>9</sup> The best effective solution in this regard is offered at the Musical Instruments Gallery of the National Museum, Bangkok, where "Instruments are exhibited in such a way as to demonstrate their use in both orchestral and solo music. 3 main orchestral groups are Mahori, Pi Phat and Khreng Sai."<sup>10</sup> That the public "worked with dancers and musicians using the sculptures as their accompaniment"<sup>11</sup> was noticed at a sculpture exhibition, "Gathering Rites", held in the Music Gallery of the Pitt Rivers Museum, Oxford in 1982. A gallery "fitted with musical instrument makers and an evening concert by the London Early Music Concert" was also provided at the Annual Conference of CIMCIM there.<sup>11</sup>

#### MIC, IASA, IAML, RCMI :

In order to achieve a long mileage in the area of dissemination of music information, the concept of Music Information Centres (MIC) is perhaps the fruitful answer. MICs, spread over all European countries and U.S.A. are important tools for promoting the cause of music and musical instruments, as preserved in different types of Music Archives of the host countries. They are the very effective organs for making CDs, Tapes, Books, Newsletters, all on musical relevance. MICs of the Scandinavian countries put a formidable force in holding Music Festivals, Cultural Exports, Symposia etc. occasionally. Specially to protect and maintain the Copyrights of the performers and the Composers, the MICs are a boon to



them. The MICs have close association with the Copyright and Author Rights Organisations, Publishers, Record Companies and all related in the Music disciplines. With the combined efforts, the MICs have been able to produce CDs on Folk Songs, Jazz, Chamber Music, Choirs, Orchestra, Symphony etc. International Association of Music Information Centres (IAMIC) covers all such MICs in the world.

International Association of Sound Archives (IASA) is another global body, established in 1969, committed to maintain international co-operation with Archives, which preserve recorded sound documents on music and musical instruments. International Association of Music Libraries and Documentation Centres (IAML), mentioned above, globally spread as professional body, is committed to the cause of documentation of music and musical instruments, preserved in different Music Libraries and Music Archives and works jointly with IAMIC and IASA. The body, devoted to the cause of Musical Iconography, is known as Research Centre for Musical Iconography RCMI, which works on iconographies of Churches, Temples, Manuscripts and Mosques, having musical relevance.

Before I conclude, I may suggest that CIMCIM can have a healthy and academic liason with MIC, IASA, IAML and RCML with regard to conservation and documentation areas of research, as the CIMCIM is believed to be committed to, according to its prescribed ethics and statutes. CIMCIM should also not encourage too much use of

internet media, as was warned by Dr. Saroj Ghosh, who said, "...The Internet may pose another threat. It has the potential of reducing a real museum to a virtual museum and real visitors to virtual visitors visiting the museum by sitting at their desks...". Second point, to be borne in mind, is to check too much commercialisation of music disciplines, which has been warned by Ivan Macak. He observed, "...The flood of commercial western music throughout the world is pushing our traditional instruments, changing value systems and threatening the foundations of these cultures, if we do not take effective steps rapidly, we will lose the many instruments, and the functioning of the relevant cultures will be lost..."<sup>13</sup> Do the prevailing commercial Music Albums, along with the production of fire and smoke on the dias, convey any aesthetic sense or communicate any concept of music heritage to the young generation, a part of which is now committed to sex, violence, drug addiction etc.? The ongoing change of upheavals in the multi-cultural society, we now live in, is heading to almost an emlosion to a point of corroding the moral values. CIMCIM can take the lead to heal up the wounds in them by making them aware of the efficacious role of the instruments, specially in the area of Music Therapy. Let the performances be treated as something spiritual, not cheap entertainment. Museum can not deny social accountability in getting this generation in confidence for harvesting better fruits of civilisation.



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# RAISING RESOURCES FOR MUSEUMS

Humera Ahmed

From the time I have taken charge of the Museum Division the constant refrain from the state and other museums have been "we have no funds". And there is a clamor for financial assistance through the scheme for strengthening of local and regional museums. Though the scheme was earlier meant for small museums run by societies and trust, taking into consideration the resource crunch and the conditions of the state museums, the scheme was extended to cover their requirements.

It is however ironical that where the state museums and the private run museums suffer from a paucity of funds, the central museums are generally not in a position to fully utilise their plan grants meant for developmental activities. However for their non-plan grant *i.e.* for their salaries and maintenance they are ever whining for more. Why is this so? This is mainly because many of the museums, which are autonomous organisations, are expected to raise sufficient resources to meet the shortfall between the grant sanctioned and the expenditure incurred on the salaries and office expenses. This, they are unable to do. Why are these museums not able to develop

activities through the plan grants and generate income through the marketing of these new services? What are the new services that can be created? But before suggesting the new services and modes, the museum personnel need to clear the mental blocks they have against the concept of marketing.

## Marketing Museums

Marketing has generally been considered an alien term in a Museologists vocabulary. Many shy away from commercialising the museum services and consider associating the business terminology as derogatory. Many still are emotionally attached to the connotations of the term museum which was applied to a place sacred to the "Muses". No one can deny that museums have enormous cultural and intellectual significance. But one must bear in mind that there is an element of show business in a museum and marketing means finding out what people visiting a museum want, what they appreciate, and what they are willing to pay for it. This has been the corner stone of the marketing strategy in most of the western countries. It is the successful implementation of this strategy which has enabled museums to raise resources and be self



sustainable.

In order to raise resources many of the museums have adopted different methods depending on the nature of the collection and the perceptions of the visitors. However, the perception of the visitor of a museum is dependent on the experience provided by the museum. In America where most museums are dependent on sponsorship, the museums are places where young people enjoy going. A visit to a museum is a pleasurable experience and therefore the visitor is willing to pay a higher fee.

Another way of raising resources is by giving tax rebates for donations and gifts to museums and art galleries. In many of the western countries, especially America, the museums do not buy artifacts and paintings; these are donated by corporations. In India too we have the National Culture Fund through which resources can be raised by the museums. But corporations are keen to invest in those ventures where the visitor is satisfied; for, the foremost objective of the business houses is to communicate with their target groups and markets. If they can do this through the museums and galleries, they would readily invest in it. Hence corporations will invest in museums only if they attract visitors and leave a lasting impression.

### Making Museums Attractive

How does one make a museum a place where the young and old want to go? For this, museologists and museum administrators must ensure that the objects in the museum arouse the visitor's curiosity and interest. It is true that objects in a museum

are tangible expressions of human ingenuity and symbols of our cultural and social history. But they need to be presented in a manner which mentally and emotionally stimulate the visitor. Now how does one do this? A museologist in a seminar said "All you have to do is to imagine yourself as the visitor and ask how would I like to see this object"? But this is easier said than done. Most museologists are so passionately attached to their objects that they can rarely see it from the point of view of a layman or visitors. But then art and artefacts arouse different emotions in different people. But there are certain aesthetic elements, which go towards making a visual experience. Besides certain pictures and forms trigger off complex associations and ideas.

If I am asked what a museum meant to me, I would promptly reply "a place where archaeological artifacts are displayed". But if I am asked about my first impressions of a museum, it would be the unique clock of Salarjung Museum, the statue of the veiled Rebecca and the double statue of a man on one side and a woman on the other. It would also be the beautiful paintings in the splendid Victoria Memorial. Why do I remember these objects? I think that all these objects—except the clock—were related to stories with which I was familiar. The veiled Rebecca brought to mind not only the well known Biblical personality but also Anarkali in Mughal-e-Azam. The double statue is an artistic expression of Goethes, Dr. Faustus with Mephistopheles on one side and Margarita on the other. The paintings in the Victoria Memorial bring alive the scenes portraying the grand events in the life of the



Empress Victoria and also the battle scenes between the British and Indians. The scenes of the last battle at Seringapatam are poignant specially the handing over of Tipu's sons to Lord Cornwallis. So also the ones which portray the betrayal and death of Tipu.

I think what emerges from my childhood impressions is that an object catches our interest if we can relate to it or which evokes certain familiar lore. The other day I was reading "Pride And Prejudice" and I found the heroine Elizabeth was also trying to find a painting in a room full of good paintings, one with which she could identify on a personal level.

Hence it can be concluded that in order to make an object interesting we have to relate it in a place and time and make it part of a story or a theme so that the object does not stand in isolation. Sometimes the placing of one object in an exhibition may give meaning and dimension to all other objects. A case in point was the recent exhibition of the "City of David", which was recently on display at the National Museum. The exhibition consisted of more than two hundred objects excavated at the ancient site which had formed the capital of the kingdom of King David. There was a large assortment of pottery, mainly jars and small figurines which may have been goddesses belonging to the fertility cult. But by themselves the pottery would have meant little except to convey their antiquity. It was the recreation of the house of Ahiel where most of the pottery was found which placed the objects in its proper perspective and enabled the

visitor to experience life as it was lived during the times of King David. Talks and lecture demonstrations on the excavations enhanced the visual experience of these objects.

This kind of recreation can be resorted to in most of our museums. Surely, the Indus valley gallery can more visually project the life in Mohen-je-Daro if replicas of the great Bath or of a house were put on display in the gallery. So too will the Bharhut gallery acquire a different dimension if a replica of the Stupa was on display. The Salar Jung Museum has constructed two new blocks—one for the European collection and another for its Far Eastern collection. But nothing in the architecture of the blocks recall the European villas or the houses of the Far East. But in spite of this drawback, the museum can still create an ambience of a European Villa through display techniques and suitable landscaping. In the Far Eastern block, the Japanese section can create the ambience of Japan through recreation of Japanese interiors and landscape.

### Reaching Out To The Young

To create an interest in museums one has to reach out to the young when they are still in School. This can be done through an imaginative teaching of history. Way back in the seventies, Smita Baxi and Vinod Dwivedi in their book "Modern Museums" had given some concrete suggestions. One was the creation of Personalia museums in schools. This can be done by the teacher who can at the beginning of every session select a historical personality and then ask



the students to prepare charts, collect photographs and books on the leader from all sources. For instance, Akbar or Ashok can be an interesting theme. Supposing Akbar was chosen, then the teacher can allot his life sketch to one student, his religious thoughts to another, his wars to a third, his building activity to another and so on and so forth. When all the tasks are completed, these can be displayed on walls along with the photographs of the paintings and buildings of his time. If possible the children could also be taken to Agra or Fatehpur Sikri.

I think if most of us were taught history in this manner we would have not only enjoyed it but also have been better aware of our cultural heritage. I found these sentiments echoed in an article "Rocks of Ages" by Jackie Newey in the magazine *BRITAIN* brought out by the British Tourist Authority. She writes "History in my class at school (another age ago) was reciting in parrot fashion the names and dates of all British monarchs. If only we pupils had been given the chance to visit a place like Castle Henllys, where history is brought to life". I hope our future generations do not have to lament the present teaching methods in this fashion.

To bring history to life should be the guiding force of the museums housing antiquities. The museums in the West through their display techniques and education services are able to recreate history. This is happening not only in Europe and America but in Asia too. Both Japan and China have taken the lead. In the new Shanghai Mu-

seum, sensitive lighting system and brilliant display techniques with excellent labeling has made it a foremost attraction for tourists. In Japan, the recently concluded exhibitions on "St Francis Xavier—His Life and Times" and "The Silk Road and The World of Xuanzang" have given a glimpse of a by-gone age.

Why can we not do the same in our Central Museums? These Museums have some of the greatest collections in the world. There is no dearth of funds for developing these museums by reorganizing their display system involving the latest techniques. Once the Central Museums are modernized they will create a positive image in the minds of the visitors. By marketing these museums, and making the public aware of their educational, cultural and tourist potential (for museums in actuality showcase our culture), these museums will create a demand for more museums. This will enable the raising of resources for the smaller museums, which can develop and gradually become self-sustainable.

It is, therefore, the responsibility of the Central Museums, which do not suffer from shortages of funds and which have sufficient infrastructure to take a lead to make the museums vibrant centers and happening places. This can be done by introducing new activities such as seminars, workshops, newsletter magazines and filmshows and by making these accessible to the members on annual membership fees. But more than this they should make the visit to their museum an enjoyable occasion.

I am sure our museums are capable of doing it.



## MUSEUMS AND MUSEOLOGY— THE ROLE OF BANGLADESH UNIVERSITIES

Md. Lutful Hye Jami

It is needless to emphasize the importance of a museum. Today the museum has already occupied a high place in the advanced countries of the world. The presence and efficiency of museum in a country are regarded as sure indications of the culture level that the country has reached. This opinion is based not simply on the fact that a museum, in its collections, illustrates the cultural progress that the country has achieved, but also on the fact that the museum has a great educational value.

Museums have an important, and a unique part to play in education, meeting the needs of both formal and informal instruction of youth and age, of the people at home and the visitor from overseas. There are no frontiers to found the exploration of the mind with the aid of museum collections. There is no end but the betterment of living based upon a wider understanding of the world to live in. In the future, as in the past, museums must concentrate on their primary duty of preserving and presenting the material evidence upon which ideas and propositions are based.

The Dhaka University was opened in 1st July 1921 as a unitary, teaching and residen-

tial University. During the British Period and on partition it was the only university in the territory now forming Bangladesh. The Dhaka Museum fell under its administrative control.

After the death of Dr. Nalini Kanta Bhattasali, the founder curator of the Dhaka Museum on 6th February 1947, the question of the Dhaka Museum's future administration and management was mooted. The Dhaka Museum Committee of Management by a resolution passed at the meeting held on 12th August 1947 resolved that the administration and management of the Dhaka museum be handed over to the Dhaka University provided that the standard and efficiency of the museum are maintained and separate entity of the library as the Dhaka Museum Library is recognised. As the Dhaka University agreed to the proposal, the Dhaka museum which was brought into being by the Government of Bengal in 1913 with an autonomous character was reduced to a University museum though it retained its public character as before. The management of the Museum vested in a committee called the Dhaka Museum Committee which was constituted by the Executive



Council of the Dhaka University on 11th November 1950. It consisted of 16 members, the Vice-Chancellor being the Chairman.

The Dhaka University made available to the Dhaka Museum a financial assistance of Taka 55,000 in 18 years, since 1953 to the emergence of Bangladesh. The Dhaka University, was not interested or was not made interested in developing the Dhaka Museum into a full-fledged university museum on the model of the Ashutosh Museum of Indian Art of the Calcutta University. The Dhaka Museum was financially very handicapped because it was not adequately supported by the Dhaka University. At first Ahmad Hasan Dani part-time Honorary Curator and later Enamul Haque, full-time salaried Curator, worked in the direction of bringing the Dhaka Museum into the fold of the Provincial Government. Subsequently the Dhaka Museum came under the administrative control of the Provincial Government. While the Dhaka University was prepared to lose the Dhaka Museum, it made no efforts to build up its own Public Museum.

Ahmad Hasan Dani writes. "The Universities of Pakistan have been rather lukewarm towards archaeology. The University of Dhaka was the first to open a group called Ancient History and Archaeology in the Department of History. The University of Punjab also provided for Ancient History and Archaeology in the History Department. The University of Karachi again made arrangements to teach a similar course in Ancient History and Archaeology in the Department of History.

In all these courses only general archaeological subjects were taught as a background and no technical teaching or training was given in the field of archaeology as was done by the Archaeology Department of the Calcutta University through excavations and field collection. It is noted here that the Department of Archaeology of the University of Calcutta came into being as an independent Department in 1960.

While an archaeological museum was attached to the Karachi University History Department to help the students in their studies, no such museum was attached to the Dhaka University History Department. However, the Department of Islamic History and Culture of the Dhaka University later by opening a group devoted to Islamic Art and Architecture, Calligraphy, Painting and Numismatics, established a museum to help the students in their studies. It is worth mentioning here that while in East Pakistan Art History was being taught under the departments of Islamic History and Culture of both Dhaka and Rajshahi universities, in West Pakistan these Departments did not offer this course.

Though the Dhaka University was the pioneer in the field of teaching art history in the whole of Pakistan, it miserably failed in the field of teaching practical archaeology. In Pakistan the Peshawar University was the only University to open in 1962 a full-fledged Department of Archaeology with the double aim of teaching and carrying out archaeological research.

During the Pakistan period the Dhaka University was the first to open a Sociology



Department. This department soon set up a museum which was highlighted under the Bangladesh Period. In the Faculty of Sciences the Dhaka University had 5 museums of which the Zoology Department Museum was highly enriched by a sizeable collection.

The Rajshahi University was started in 1st July 1953. In 1961 the Varendra Research Society submitted to the then Provincial Government a scheme for the improvement of the Varendra Research Museum, Rajshahi. The Department of Archaeology and Museums was keen to take over the Rajshahi museum to develop it into a central museum for training of museum personnel. At that time the elite of Rajshahi was apprehending that the Rajshahi museum, once taken over by the Government, would be deprived of its valuable antiquities which might be removed to Dhaka or Karachi. Dr. Azizur Rahman Mallick the then Curator of the Museum, took the troubles to make over the museum to the authority of University of Rajshahi. He succeeded in persuading the then Chairman of the committee of Management Mr. P.A Nazir, CSP, the Deputy Commissioner of Rajshahi to appreciate his proposal of transferring the museum to the University rather than to the Provincial Government.

The immense education value of an Archaeological and Historical Museum for Rajshahi University is being felt since its inception. The Syndicate of the University in an emergency meeting adopted a resolution appreciating the essential need for a museum and resolved that the government should be persuaded for handing over to

the university the local Varendra Research Museum. The museum will henceforth be managed by the Rajshahi University and developed by them as per scheme "The improvement of the Varendra Research Museum, Rajshahi" approved by the Executive Committee of the National Economic Council at a cost of Rs. 1.50 lacks.

In accordance with the Resolution of the meeting held on 10th January 1965 the Syndicate of the Rajshahi University constituted a 13 member Advisory committee to administer the museum. The Vice-Chancellor of the University became the Chairman of the Committee. With the transfer of the Rajshahi Museum to the Rajshahi University on 10th October 1964 the Varendra Research Society became defunct and the museum remained the Varendra Research Museum. On 1st July 1965 the University assumed full financial responsibility of the Museum. However, the salaries of the full-time employees were placed and fixed on the pay-scales of the University with the benefit of the arrears.

The Chittagong University was inaugurated on 26th November, 1966. On that very day a special exhibition of 24 items, 14 arms including 3 inscribed canons, 9 textiles and one palanquin, was held to mark the occasion. The special exhibition was a prelude to the establishment of a museum under the auspices of the new-born University. Mr. Mumtaz Hasan, the then Managing Director of the National Bank of Pakistan, and President of the Museums Association of Pakistan was personally responsible for giving birth to some museums in Pakistan, was



instrumental in providing an incentive to the goal by his generous gift. The first Vice-Chancellor of the Chittagong University, Professor Azizur Rahman Mallick was a historian, whose personal initiative was greatly responsible for bringing the Varendra Research Museum under the Rajshahi University in 1964.

Professor Abdul Karim, Chairman of the Department of History (later became Vice-Chancellor of the Chittagong University), was quite instrumental in setting up a University museum. It is the Department of History of Chittagong University that took the lead to set up the first university museum. As a first step a museum was started with the collection from Mr. Mumtaz Hasan at the Department of History in 1966. The Department started publishing even a Journal entitled *Itihas*.

It is interesting to note that Professor A.R. Mallick, the late Vice-Chancellor of Chittagong University assured the former Director-General of Bangladesh National Museum, Dr. Enamul Huq of introducing Archaeology as a minor subject in the Bachelor of Honours from 1970-71. But the assurance was not materialized probably due to the political problems and turmoils in the then East Pakistan. After the liberation of Bangladesh till to date steps have not yet been taken to introduce archaeology as a minor subject in either graduate or post-graduate courses.

After 1971 the Dhaka University has so far given birth to eight museums. Of all the university department museums we find the Dhaka University Sociology Department

Museum to be the most dynamic. This department museum in December 1978, published Brochure on Muslim objects which gives a brief history and the objectives of the museum. The Dhaka University Islamic History and Culture Department Museum, once a growing museum is now static.

After the birth of Bangladesh the Rajshahi University set up two new museums : (1) Rajshahi University Geology and Mining Department Museum and (2) Shahid Smriti Sangrahasala. The Rajshahi University now owns 2 public Museums and 5 Department Museums. During the period between 1972 and 1985 the Varendra Research Museum has witnessed no physical expansion.

The political situation in 1971 prevented the Chittagong University from establishing a University Public Museum though its offspring, the Chittagong University History Department Museum, had already come into being. In 1972 Professor Abdul Karim, Chairman of the Department of History, prepared the preliminary scheme for the proposed museum. On 13th June 1973 an Assistant Curator was appointed and thus the Chittagong University Museum was started. On 14th June 1973, the Museum started functioning formally without any formal inauguration. The Deputy Commissioner of Chittagong allotted one half of Chittagong Kalabhaban on Moulana Mohammad Ali Road at Mehdibagh on 1st October 1976. Since then it has been functioning there in a total floor area of 1018 square feet.

The Chittagong Museum by now has ac-



quired a considerable collection of Bengal sculptures. Bengal conins arms and armaments and textiles. The other collections include architectural members, stone inscriptions, terracotta plaques and ornamented bricks, metalwares, ivory objects, ceramics, old manuscripts and documents. To add varieties to the collcetion the museum has acquired a good number of contemporary paintings, tapestry and sculptures. To depict the advancement of art in rural Bengal a large collection of folk art has also enriched the museum.

A meeting of a group of experts on the training of museum personnel held at Berne in Czechoslovakia in 1967 under the auspices of ICOM, symbolizes the first effort to have museology recognised as a scientific discipline in Universities. Since then museology as a course of study has started receiving academic recognition in many universities in the world, notably in the developed countries. In the Indian subcontinent India remains the only country where museology has become a course to study as the postgraduate level in several universities, viz, the M.S. University of Baroda, Gujarat, the Calcutta University, the Bharat Kala Bhaban of the Benaras Hindu University and the Aligarh Muslim University.

No developing country can afford to send out all its museum personnel for education or training abroad. A course of study in Museology at the post-graduate level in Universities as well as facilities for training in Museology in a centre under a non-academic programme must be available within the country.

India has done that quite admirably. In Calcutta the Ashutosh Museum of Indian Art, established in 1937, provides all the facilities for practical work to the Department of Museology of the Calcutta University. Although the Rajshahi University took over the Varendra Research Museum in 1964 that contains the best and finest collections of Bengal art, yet the Rajshahi University has miserably failed to open a Department of Museology or even a Department of Archaeology, having the finest sites of archaeological objects and interest in the whole of Northern Bangladesh.

In spite of the fact that the Dhaka University administered the Dhaka Museum from 1947 to 1970 which was older than the Ashutosh Museum of Indian Art and held the largest collection of cultural property with many outstanding specimens in Bangladesh, the Dhaka University has failed to open a Department of Archaeology and Museology.

Jahangirnagar University is the only University in Bangladesh that has established a separate Department of Archaeology in 1990. It has offered courses of Museology in postgraduate level. Thanks to the authority of Jahangirnagar University and the Ford Foundation, USA for taking initiative to establish a separate Department of Archaeology. Special compliments and deepest gratitude also go to the Ford Foundation that financed Jahangirnagar University teachers to study abroad for higher research and degrees. Two of the four university teachers have already returned with Ph.D. degrees from Deccan College of Ar-



chaeology, Pune, India. The remaining two are in their final stage of the Ph.D. programme in the same institution. But the Department has not yet produced any specialized or trained person in Museology. The Department has a small museum enriched with some invaluable collections of our glorious heritage.

Though Rajshahi and Dhaka are both situated in the midst of places of archaeological interest, no steps have yet been taken to open two separate departments of Archaeology and Museology in any of the universities there. There is now an imperative need for courses in these two important subjects in Bangladesh. It is our fervent hope that the University of Rajshahi will give the lead by opening a department to provide training in Archaeology and Museology in the near future.

But the government remains indifferent towards Rajshahi Museum even though a scheme for its development was submitted to the government in October 1977. Though strongly recommended by the University Grants Commission of Bangladesh the scheme is still now under consideration of the government.

The Chittagong University Museum is also receiving no attention from the government in spite of the fact that the Board of Trustees of this museum submitted a scheme in August 1977. The Dhaka University Sociology Department Museum which has a fairly rich collection of ethnographic interest should be seen not only as a contributor to departmental studies in the narrowest sense, but as the custodian and in-

terpreter of its valuable collection to the education of students in the widest sense. It is our view that the collection of this museum taken as a whole is an under-used national asset though it is situated in a university which has the highest level of cultural and educational standards in Bangladesh.

There is virtually no prospect of the University Grants Commission providing an allocation for a new museum building either for the Varendra Research Museum or for the Chittagong University Museum as an independent project since this could hardly ever be justified in strictly academic terms in competition with other projects. In fact, in the struggle to meet other urgent responsibilities, the universities cannot be expected to spend more on museums. Throughout the world universities are sponsoring public museums. It is through public museums that universities can come closer to the people at large and prove their usefulness to them.

We suggest that the university public museums in Bangladesh be developed substantially to enable them to play their role more effectively in the services of the people at large. The locations of Varendra Research Museum and the Chittagong University Museum justify their immediate development in consideration of the fact that Rajshahi is an important town both educationally and culturally while Chittagong is the second largest city in Bangladesh. I strongly hold that any scheme for the establishment or development of a university public museum should come under the pur-



view of the Cultural Affairs Division of the Government of Bangladesh.

As regards the university department museums the University Grants Commission should lay down its policy and procedures for both capital and recurring grants. The university department museums have to be developed at a professional level, and collections have to be augmented substantially through expeditions and field work so that our universities do not remain predominantly teaching universities.

Our universities should become highly research oriented institutions capable of producing many Ph. D. at home and sponsoring or undertaking many such research projects as are based upon specimens that

is, primary sources of human knowledge. We understand the financial implications of the wider role of the university department museums in view of current financial restrictions.

Since no element in expenditure on the University department museums can be regarded as falling outside the University's normal requirements for teaching and research, we believe that with utmost consideration, strict economy and fair judgement it would be possible to provide funds to make a start in this direction. Unless we do it, we have hardly any chance of developing fundamental research in museum studies in our universities so vital for the advancement of the glorious cultural heritage of Bangladesh.



## MY SANGRAHALAYA

Ram Kripalu Sharma

**B**ig and small Museums and manuscript-collections of no little importance are dotted in every state of the country. However, the Indian Museum happens to be the oldest and the foremost one among them all. It has its own importance and distinction. The rare honour extended to a collector and manuscript-lover like me touches the core of my being with gratitude.

It was only with a legacy of four manuscripts that, by dint of my solo efforts, *Shree Sanjay Sharma sangrahalaya and Shodh Sansthan* came into being in 1955 under the name of "*Sharma Granth Sangrahalaya*."

However, the collection started growing along with various art objects. The first formal inauguration of the Sangrahalaya was made on April 25, 1970, by the then Central State Minister of Education, Shri Bhakta Darshan. But then the number of manuscripts in the collection was only 30 thousand. I had taken a resolve that the Museum will be dedicated to the nation, only when the manuscripts will touch the hundred thousandth mark.

The great inspiration for setting up this Museum cropped up in my mind, when at

the age of 18, I had composed "*Pranjali*" a book of verses. The foremost poets Sumitra Nandan Pant, Mahadevi Varma and Dr. Ram Kumar Varma. However the publication was possible only after incurring a debt. When lack of funds prevented me from publishing my next literary venture, entitled "*Vangmayi*" and it could not see the light of the press, it gave me many a heart-throb. My attention then digressed to thousands of years back, when so many of the *Rishis, Munis*, and learned scholars had authored books and they could never avail the glory of publication. Who am I as compared to those august personages, I thought and took up assiduously the work of book collection in place of book-writing. My younger son, Sanjay left us at an early age for his heavenly abode. He appeared in the family like a *Yogi*, and left us immersed in tears after a brief sojourn. No amount of medical care and treatment could save him. It was for immortalising his memory that I changed the nomenclature of my collection to "*Shri Sanjay Sharma Museum & Research Institute*." Today, it is a public Trust which owns about 1.25 Lakh manuscripts, art objects of various kinds, paintings and other



artefacts. It was duly inaugurated and thrown open to the public by the Union H.R.D; Minister Dr. Murali Manohar Joshi on 12 February 1999 and presently it has become a symbol of national glory and Indological treasure.

Under the joint collaboration of "Archana" a literary Society, I have arranged an exhibition of old manuscripts and paintings which remains open to public view from 11th to 13th September (upto 7.30 P.M.). The exhibition has displayed more than 200 old manuscripts and hundreds of paintings for the benefit of this city of connoisseurs of art, culture and literature and I believe that all of you have visited it.

It has touched my heart with gratitude that the learned Director of the Indian Museum, Dr. Shyamal Kanti Chakravarti inaugurated that exhibition and delivered a scholarly address. The Chief guest of the Exhibition was the former Chief Secretary of the West Bengal Government, Shri Tarun Dutta.

The subject of the lecture allotted by the Indian Museum to me is, "My Sangrahalaya". The more I say about it will still be less. However for the sake of doing justice to the subject, I shall classify the material preserved in Shri Sanjay Sharma Sangrahalaya into three categories to facilitate its description. They are—The Manuscripts Division, the Rich Paintings Division and thirdly the Antique Arts Division.

The Museum has a very rich collection of old manuscripts, manuscripts on palm-leaves and birch-barks, archives, *pattas*, *parvanas*, *bijaks*, *Dastur-bahis*, and

calligraphies. The manuscripts alone number about 1.25 Lakhs. I would first of all draw your attention towards the highly important collection of manuscripts.

Rare manuscripts in 16 languages covering 48 subjects are there in the collection. The trials and travails through which I had to pass in obtaining and preserving these rarities, is another tale of woe, on which I am not going to dwell here.

### SOME IMPORTANT MANUSCRIPTS

1. Following the tradition of illustrated manuscripts, the work known as "*Ashwa Ratnakar*" was written under the patronage of the king of Jaipur state, S. Madho Singh. The manuscript has 108 illustrations. This book on Horse-Therapy is based on the authorities and experts on the subject like Nakul the Pandava, Sain Dan, Vishnu Das, Bahad, etc.
2. The *Museum* preserves 125 manuscripts on the subject of Elephant-Therapy, ranging from the works of Palkapya Muni upto the 19th century writers like Zorawar Khan, Imam Bux, Rahim Khan, Faizu Khan etc.
3. The *Museum* contains Abul Fazal's *Aine Akbari*, in Hindi translation with illustrations. The work was commissioned by Maharaja Sawai Pratap Singh to Gumani Ram Kayastha. Only two copies of this illustrated manuscript exist in India—one being with the Museum and the other is preserved in the Alwar Museum.
4. The *Museum* in possession of a rare



copy of Tulsidas "*Ramayan*" which was scripted in 1682, just two years after the saint poet's death. It happens to be the rarest and oldest, after the original in the poet's hand.

5. The manuscript of "*Bihari Satsai*" in our collection is of rare importance, being scripted in the poet's own life-time, i.e. V.S. 1713.
6. There is another important manuscript, entitled "*Shahzada Gulab Umar Ki Varta*" authored by Vijay Vachak. The manuscript contains 64 illustrations of the Bikaner style.
7. Among the literature composed by saint poets, the Museum has Sant Dadu Dayal and his *Guru Budhan ji*, and other saint poets of the period, Sants Jagannath ji, Balak Das ji, Teela ji, Garib Das ji, Chanda ji etc. along with their portraits. The lady saints include Sahajo Bai, Mira Bai, Lahuri Bai, Baki Bai, with their portraits and manuscripts.

#### THE RICH PAINTINGS DIVISION FULL OF RESEARCH POTENTIAL

This collection has succeeded in establishing its identity on the basis of its painting Division too. The history and tradition of paintings right from the 13th Century upto the 20th, has come alive in its Art galleries.

- Total representation and display of the painting styles of Jaipur, Jodhpur, Mewar, Kota, Bundi, Sirohi Jhalawar, Kishangarh, Nathdwara, Mughal, Pahari, Gujarati, Marathi, Patna, Oudh, Oriya, Islamic, Tanjore, Hyderabad, Mysore, Bengal,

Punjab and other Centres can be seen in the collection.

- The complete illustrations series on Geet Govind, paintings on palm-leaves and the *Krishna Leela* paintings on palm-leaves based on the Bhawwat dating back to 13th century are highly pregnant with research potential.
- The Large panel of Jain painting showing the Jain Acharyas from 450 A.D. to 1750 A.D. In their successive order is highly important from the research point of view. The *Sthanakvasis* the *Mandir-Margis* and the *Khartargachchha* Branch of Jainology have been displayed therein in the *Guru-Shishya* (Master-disciple) tradition. Along with illustrated Jain manuscripts, we have also displayed Jain paintings including a *Vigyapti-Patta*, inviting the Jain saints for "*Chaturmas*" (Four months of the rainy season.) It is an 18th Century paintings in the Bikaner style.
- More than sixty paintings of one artist Kaluram Sadh, Who executed 1753 paintings on different subjects related to Jainology are on display. The painter was a resident of Baghera (Ajmer), who had dedicated 60 years of his life to these paintings. These paintings awaken a new type of social consciousness. In one of his panels, Kaluram Sadh has shown the consequences of perverted thinking and conduct. In my opinion, the series of such paintings should see the light of publication today. So that the society may gain a new awareness.
- The systematic tradition of the paintings



of the Jaipur School in the 18th, 19th and the 20th Centuries has been displayed in Museum, thereby relating Jaipur's history of three hundred years through the medium of paintings. The painter's names are Saligram Govind, Chhotilal, Ram Pratap, Ram Chandra, Chhaju, Chandra Chitera, Yajendra Sharma and Ganesh Musavvir. The subjects vary from gods and goddesses the paintings of Rag-raginis and Dash Mahavidya the paintings for the children. Authentic paintings of Raskapoor and Maharaja Jagat Singh are also on display.

- Other painters represented in the paintings Division who display various styles are Sahib Deen of Murad Bux of Bikaner, Sanwar Dan of Asind (Deogarh), Rakhdaula of Ajmar, Dana Bhati of Jodhpur, Pt. Kashi Ram Sharma of Jhalawar, Dadu's disciple Jayat Ram, Gambhar of Sanwar and Murali Dhar Buxi of Bundel Khand with their authentic paintings.
- The Patna style paintings on mica-sheets of the Company school display portraits of Government servants *durbans* (Door-keepers) *syces*, goldsmiths, black-smiths, *Telis* (Oilmen), *Dhobis* (Washerman), *Nais* (Barbers) *Kahars* etc. These paintings were executed on special orders from the British for their friends in England to enable them to understand the social structure of India. Before the advent of photography, it served as a useful medium of expression.
- The *Yoga chitravali* in the Bundel Khand style of paintings executed in the 18th

century is also exhibited in the Museum. This series was painted by Dadu Dayal's disciple Jayat Ram and prescribes "Asans" (Postures) for the treatment of prevailing diseases, and freedom from all disease in future.

- Old pictorial series for children's entertainment helps in their mental development, thus combining pleasure with mental growth. They impart new informations to the child's mind. The subjects painted are gods, men and women, animals and birds etc. and show how many pictures can be made from one painting, the new formations adding to the child's knowledge. These paintings are in the Jaipur, Jodhpur, Mewar and Bikaner styles and provide a new subject for researchers.
- Illustrated works of an out-standing scholar of Jaipur Vidya Vachaspati Pt. Madhusudan Ojha are plenty in the Museum. A whole floor of the Museum will hardly be enough for their proper display. These include commentaries on puranas, "*Vishwa Vikase Ayurbhuvan Kosh*" (illustrated), "*Vishwa Vigyane-Divya Vigyanodaya*", (illustrated), "*Abhibhootam Jagat*" (illustrated), "*Vishwa Vigyan Chitravali*", *Vishwavigyane Paratpar Parmeshwar* (illustrated) and so on. All his illustrations are related to the origin *Atma* (self) and *parmatma* (The ultimate God), geography and cosmology and the origin of the creation. The *Rishi Vanshaval*i (Genealogy) of the *Ved Sanhita* painted by Pt. Madhusudanji is a large canvass 7 ft. x 4 ft. in dimensions which



has also been exhibited in the Museum. Apart from these are hundreds of works written in Ojha ji's own hand on subjects like *puranetihas*, *Vyakarana* (Grammar) etc. It is material enough for 50 researchers.

The painting Division, full of vast and immense research potential, has already been described above. Not going in more details, I am now taking up another Division comprising various artefacts which are also open to further research.

### Various Art-objects-for further scholarly exploration

Shri Sanjay Sharma Museum & Research Institute has a vast treasure-trove of art-objects. Some of which have an immense research potential. They are in brief :-

1. **Sandals :-** More than 40 pair of sandals (With only a toe-hold) used by *Rishis*, *Munis*, *Brahmans*, *Maharajas* (King), *Maharanis*, Emperors, *Begams*, and *Seths* etc. are on display here representing various styles. They range back from the 13th to the 20th Century. They are made of Sandal wood, ivory, mother of pearl, with wire-in-lay work ordinary wood, and sandals with silver and gold in-lay. Some of them were used by the religion's heads of various sects, Sandals with acue-pressure points, Sandals for inflicting punishment in penance, Sandals as objects of worship are all there on display, it is an art technique full of potential for research.

2. **Lamps :-** Various types of lamps and lamp stands of hundreds of years of antiquity are displayed in the museum.

There are lamps used exclusively in tantric processes. They are made of stone, copper, brass and iron. Their shapes are *vanarakriti* (monkey shaped), *shukakriti* (parrot-shaped) *Kamaldeep* (Lotus-shaped), *GajLakshmi deep* (shaped like Lakshmi flanked by elephants on either side) *Saubhagya-Laxmi deep*, *Garud* (shaped like a garud (eagle), and pressure Lamps. The patterns, techniques, antiquity and usage need further scholarly exploration and research.

3. **Games material :-** Some exclusive specimens of indoor games played the mediaeval ages and earlier, are also on display. Such entertainments include *Chaupar*, *Shatranj* (chess), *Ganjifa* (Old variety of playing cards in India), *Dash Kaura*, *Sarpa-seedhi* (Snakes and ladders) and their beautifully embellished clothboards, adorned with embroidery and bead-work. These leisure pastimes were equally popular in male and female royal apartments. They can also provide research material.

4. **Book-covers :-** Book-covers dating back to 15th century onwards, with illustrations and embellishments are on display. The subject of illustration varies from God and Goddesses to hero-heroines and from *Ashta-Mangal* to various costumes and glimpses of Jagannath ji, and *krishna Leela*. These illustrations are in the painting styles of Orissa, Mughal, Mewar, Sirohi, Kota, Bundi, Gujarat, Maharastra, Jaipur, Jodhpur of Pahari etc. Book-covers in hundreds can be seen embellished with *Zari* work, wire



in-lay work and *varnamala* (Letters of the alphabet). Also displayed are old *Sanganeri* and *Gujarati* style book-covers, along with book-printing of south India.

5. **Glass-paintings :-** Glass-paintings of 16 different styles and subjects from India, and also in Dutch, French and Chinese styles have been displayed in the Museum. The mica-sheet paintings of the company style showing officials, orderlies, artisans and workmen are important as they were made on order to acquaint the British society with the Indian social structure.
6. **Textiles Division :-** The textiles collection is also very rich. More than a thousand big and small textile-pieces, embellished in various styles are on display. The prints and decorations of *Sanganer*, the artistry and embroidery of *Machhlipattam*, floor-spreads of "*Karchobi*" work in *Mughal*, *Benaras* and *Mewar* styles, *Rajasthani gota* and tie-and-dye works, old emboidered *Kashmiri* textiles etc. have been exhibited tastefully. *Gujarati* and *Rajasthani* prints dating from the 15th to the 20th Century have also been exhibited. The *Toran-gate* of *Sanganeri* work with *Dashavtar* (Ten incarnation of the Lord) illustrations is especially remarkable.
7. **Wood-craft :-** Artistic wood work of unquestioned antiquity present in our collection invites greater exploration and research, The wood figurines of *Jaipur*, *Bundi*, *Kishangarh* and *Maharashtra* and their orchestra parties, the mother of pearl in lay work of the swing from *Kutch* are noticeable exhibits. There is a *pagaridan* (Turban-stand) from *pokarana* (Rajasthan) which is made of bamboo sticks and cow-dung painted with *chandra ras*. It has the *Dashavtar* illustration.
8. **Tantri Yantras (mystic diagrams) :-** More than five hundred canvasses depicting the *Yoginiyantra*, *Shree-Yantra*, *Ekakshar Ganpati Yantra*, *Dash Mahavidya Yantra*, *Navgraha Yantra* etc. used in *Tantric* practices for total fulfilment or a single wish fulfilment invoking the proper gods, according to the *Vam-Margi* and *Dakshin Margi Tantra* practices also provide good research material.
9. **Sketches :-** About a thousand sketches or line-drawing of different painting schools are on display. They include 3 ft. x 2 ft. sketches also executed during *S. Pratap Singh's* time in *Jaipur*. These line-drawing also open up vistas for further research. A proposal for arranging an exhibition of these line-drawing in the *Jawahar Kala Kendra* is also under active consideration.
10. **Veda pictures and Vedic-material :** For performing various *Yagya-Yags* and making altars (*VEDI*). There are hundreds of illustrated specimens on display. For performing *Karmakand* rituals, these illustrations are needed. The wooden utensils used in *Yagyas* and other *Yagya-paraphernalia* are also fully represented in the collection. These pictures of *Yagya-Yag*, *Vedi* and appliances call for further scholarly research.



11. **Astronomical appliances :-** The large sized *Yantra* of the *Jaipur Jantar Mantar* are all shown as models in our collection. The implements used in making them are also on display in large numbers. Wooden scales for measurement have also been exhibited. Manuscripts in the Persian and *Sanskrit* languages related to these astronomical applicants explaining them in detail are also there. These appliances are made of copper, brass, iron, marble, wood and on paper. These were made by learned astronomers from Bundi, Jaipur, Kuchaman and Danta-Ramgagh, in ancient ages. These geometrically shaped implements are good topics for research.
12. **Architecture :-** The illustrated manuscripts on *Vastu-shastra* (Architecture) tell us all about building step-wells, wells, ponds, as also about houses of common house-holders royal-palaces, royal thrones, and temples of various designs with the aid of pictures.
13. **Araish (Frescoe-Buono work) :-** The pictures made on *Araish* are available in the collection in large numbers. For making a picture on polished and furnished line surface, a process of Tracing 10 stencils is required, which are in the

form of charts. These pictures for the Fresco-Buono paintings are mostly of the *Jaipur Kalam*. They include gods and goddesses, animals and birds, belbutas (patterns of ivies and flowers) and of *Radha Krishna Lilas* (Playful deeds). This now extent style of Fresco paintings needs to be renovated and the process needs to be preserved as a branch of knowledge, for which these exhibits come handy.

I have hinted out in brief the existing material in my collection, the limitless wealth of manuscripts and their hidden research potential, and the furtherance of this work and its implementation falls to your share.

I salute the land of Bengal once again from the deepest core of my heart, the land which has produced towering statesmen and greatmen like Subhash Chandra Bose, Jagdish Chandra Bose, Majumdar, Babu Chittaranjan Das and the outstanding men of letters like Rabindra Nath Tagore, Sarat Chandra, Bankim Chandra Chattopadhyaya and Vimal Mitra. I am highly grateful to Dr. Shyamal Kanti Chakravarti, Director, Indian Museum and the literary body named "*Archana*" who have been instrumental in my visit and talk here.



# LIST OF ORNAMENTS FROM NORTH EASTERN STATES IN THE ANTHROPOLOGY SECTION INDIAN MUSEUM, CALCUTTA

Rekha Chatterjee

## Introduction

Indian tribal people have got a great love for personal ornaments. The tribal population especially of the north-eastern states belonging to a common ethnic group called the Indo-Mongoloid prefer to decorate their bodies with both external ornaments and embodied decoration. The embellishment of person both of male and female in the tribal context is influenced by the magico-religious beliefs being linked with respective social institutions.

The ornaments used by the ethnic people of north-east are made of materials from the natural resources available in their own localities. Indian Museum collection of ornaments belonging to north-east Indian tribal folk began as early as 1867 with specimens from Sibsagar in Assam and the Naga hills. In this year Mr. S. E. Peal collected for the Museum a wooden comb and a cane anklet; while he presented an

ear-ornament made of bamboo from the Chang-Naga community in the year 1872. Major H. Paban collected a brass ear-ornament from the Thangkul Naga tribe. A few head-ornaments, armlet bangles, hair pin, finger-ring of the Sema and Thangkul Nagas were received from the Chief-Commissioner of Assam in 1876, Lt. J. Gregory offered to the Museum a few cane and wood ornaments in the same year. In the beginning of the 20th century, to be specific, in 1902 an armlet made of cloth and studded with cowrie-shells was gifted to the Museum by Lord Curzon—the Governor General of India. In the year 1886 another interesting purchase of an armlet, made of hair and cotton thread was made for the Museum by E. Oldham, then Director of Geological Survey of India. Equally interesting is a stone bead necklace acquired by Dr. B. S. Guha from Jabuka—Naga community in 1929. The latest significant collection of tribal ornaments of the



north-east were purchased from Mrs. Milada Ganguli in 1990.

In fine, the tribal ornaments in the Anthropology section of the Indian Museum represent the AO, Kabui, Dhota, Jabuka,

Thangkul, Chang, Sema, Angami, Konyak, Rongmai, Bora-Thuchang communities of Nagaland; Khasi and Garo of Meghalaya; Adi of Arunachal Pradesh; Lushai of Mizoram and Bhutias of Sikkim.

Sl. No.	Acc No.	Name	Description	Community	Source
1.	12487	Horn Bill Feather	Horn bill feather ; it is used by the Wines as hair ornament of the Chiefs	Naga Nagaland/ Manipur 1969	Kohima
2.	12439	Khuji	Bangle, one pair made of metal highly decorated and designed body	Imphal/ Manipur 1969	Purchased
3.	12484	Azuk	Necklace, made of large beads and bone pieces	Ao-Naga Nagaland/ Manipur	Exchange
4.	12483	Shiret-Zuk	Necklace, made of amber coloured beads and bone pieces	Ao-Naga Nagaland/ Manipur	Received on Exchange
5.	12481	Tong Pang	Ear ring, One pair square shaped ear-rings, made of crystal	Ao-Naga Kohima/ Nagaland	Received on exchange basis Exchange
6.	12429	Keppi	Made of conch shell in the half, designed body by the Paite women	Paite Manipur State Museum	Received on exchange basis Collection
7.	12429	Khina	Necklace ; ambar coloured beaded necklace used as ornament Lt. 62 cm.	Peite Pinghat Vill. Manipur	Collected by Smt. S. Dey in 1968 Collection



Sl. No.	Acc No.	Name	Description	Community	Source
8.	12444	Tue	Necklace, made of orange coloured beads, one gingle is attached with it as a locket worn by the females Lt. 86 cm.	Kabui-Naga Manipur State Museum, 1969	Purchased
9.	90.94	Necklace	Necklace made of beads with a pendant of 3 brass heads Lt. 54 cm.	Naga Nagaland 1990	Purchased
10.	90.95	Bracelets	Bracelets (1 pair brass), dia. 4.5 cm.	Naga Nagaland 1990	Purchased
11.	90.96	Bracelets	Bracelets (1 pair brass) dia. 5.5 cm.	Naga Nagaland 1990	Purchased
12.	90.97	Armlet	Armlet (brass). dia. 5.5 cm.	Naga Nagaland 1990	Purchased
13.	90.98	Ear ornament	Ear ornament	Naga Nagaland 1990	Purchased
14.	90.99	Ear ornament	Ear ornament (Bamboo)	Naga Nagaland 1990	Purchased
15.	90.100	Armlet	Armlet (cane) 1 pair dia. 8 cm.	Naga Nagaland 1990	Purchased
16.	90.101	Armlet	Armlet (cane) 1 pair dia. 7.5 cm.	Naga Nagaland 1990	Purchased
17.	90.102	Cane rings	Cane rings (Cane) dia. 10 cm.	Naga Nagaland 1990	Purchased
18.	90.103	Head band	Head band dia. 17 cm.	Naga Nagaland 1990	Purchased
19.	90.104	Head band	Head band Dia. 15 cm.	Naga Nagaland 1990	Purchased



Sl. No.	Acc No.	Name	Description	Community	Source
20.	12516	Necklace	Necklace—made of shell and wood	Naga Nagaland 1990	Purchased
21.	12517	Ivory comb	Necklace, made of shell and wood	Naga Nagaland 1990	Purchased
22.	12520	Necklace	Necklace with glass beads	Naga Nagaland 1972	Purchased through Art Purchase Committee.
23.	12521	Necklace	Necklace with glass beads	Naga Nagaland 1972	Purchased through Art Purchase Committee.
24.	2687	Head masoli	Head masoli — made of metal	Naga Khasia & Jaintia Hills	
25.	1544	Brass bangle	Brass bangle, dia. 8.5 cm., cir. 29 cm.	Naga Naga Hills 1876	
26.	4816	Brass ear rings	Brass ear rings	Naga Naga Hills 1876	Chief Commissioner of Assam
27.	2822	Brass finger rings	Brass finger rings, dia. 1.7 cm.	Naga Naga Hills	
28.	1538	Brass bracelet	Brass bracelet	Naga Naga Hills	
29.	4852	Bangle	Bangle — made of lead (one pair)	Naga Naga Hills	
30.	1543	Brass bangle	Brass bangle (one pair)	Naga Naga Hills	
31.	1544	Brass bangle	Brass bangle	Naga Naga Hills	
32.	4834	Bangle	Bangle — made of metal	Naga Naga Hills/Thangkul 1876	Chief Commissioner of Assam



Sl. No.	Acc No.	Name	Description	Community	Source
33.	1549	Anklet	Anklet — made of metal	Naga Naga Hills/ Thangkul	
34.	1545	Brass bangle	Brass bangle	Naga Naga Hills/ Thangkul	
35.	1547	Brass bangle	Brass bangle dia. 5.5 cm.	Naga Naga Hills/ Thangkul	
36.	1533	Bangle	Bangle — made of lead	Naga Naga Hills/ Thangkul	
37.	11672	Brass Ear-ring	Brass Ear-ring (1 pair)	Lota Naga Naga Hills/ Thangkul	
38.	4854	Brass hair pin	Brass hair pin	Lota Naga Naga Hills/ Thangkul	
39.	1538	Brass armlet	Brass armlet dia. 5 cm., width 4.4 cm.	Lota Naga Naga Hills/ Thangkul	
40.	1845	Churi	Lahar Churi — made of lac dia. 5.9 cm., circ. 30 cm.	Lota Naga Goalpara, Assam	
41.	1844	Bracelet	Lahar Babu (Lac) bracelet— made of lat	Lota Naga Goalpara, Assam	
42.	1529	Bead	Bead string—made of glass bead	Naga Nagaland	
43.	7888	Necklace	Necklace — made of Coix and Abrus seed	Jubuka-Naga Nagaland	
44.	7886	Seeds string	Seed string	Jubuka-Naga Naga Hills	
45.	4824	Brass bead string	Brass bead string	Jubuka-Naga Naga Hills 1876	Chief Commissioner of Assam on 1876



Sl. No.	Acc No.	Name	Description	Community	Source
46.	1535	Necklace	Necklace—made of Agate and shell	Jubuka-Naga Naga Hills	
47.	11689	Necklace	Necklace made of stone 'Lokubmolong'.	Jubuka-Naga Naga Hills 1929	Collected by Dr. B. S. Guha on 1929
48.	1537	Ornament	Brass ear ornament	Jubuka-Naga Naga Hills 1929	
49.	4840	Finger ring	Finger ring — made of bone	Thangkul Naga Naga Hills 1876	Chief Commissioner of Assam in 1876
50.	3542	Comb	Comb — made of wood	Sibsagar, Assam 1867	S.E. Peal Esqu in 1867
51.	4826	Hair pin	Hair pin — made of iron	Naga Naga Hills 1867	Chief Commissioner of Assam in 1876
52.	4826	Hair pin	Hair pin — made of iorn	Naga Naga Hills	
53.	3076	Ear ornament	Ear ornament — made of bamboo with white disc like shell used by men	Chang Nage Naga Hills	S.E. Peal Ecur in 1872
54.	1650	Ear ornament	Ear ornament — made of seed	Nage Naga Hills	
55.	4835	Armlet	Armlet — made of seeds dia. 7.5 cm., cir. 43.7 cm.	Thangkul Naga Naga Hills 1876	Chief Commissioner of Assam in 1876
56.	4838	Ear Plug	made of wood	Thangkul Naga Naga Hills 1876	Chief Commissioner of Assam in 1876
57.	3536	Anklet	made of cane	Naga Sibsagar 1867	S.E. Peal Eour in 1867



Sl. No.	Acc No.	Name	Description	Community	Source
58.	8825	Ornament	Head ornament — made of pithe Hepla-Plurum Hypolrecum dia 7.5 c.m.	Naga Naga Hills 1902	Collected by Dy. Commissioner in 1902
59.	2986	Ornament	Ear ornament — made of cane	Naga Naga Hills 1876	Licht J. Gregery in 1876
60.	9285	Armlet	Armlet — made of cloth studded with cowre shells lt. 10.5 cm., dia. 5.5 cm.	Sema Naga Naga Hills 1902	Presented by H.E. Lord Curzon in 1902
61.	4882	Armlet	Armlet — made of cane	Sema Naga Naga Hills 1876	Chief Commissioner of Assam in 1876
62.	11662	Armlet	Chetu (Lac) Armlet — made of wood	Naga Hills, Manipur	
63.	7256	Armlet	Sita (Lac) Armlet — made of wood	Naga Hills	
64.	1653	Ornament	Brass ear ornament	Naga Banpara	
65.	10480	Bracelet	Bracelet — made of bamboo	Naga Banpara	Purchased by Dy. Commissioner in 1908
66.	7248	Ornament	Phesa (Lac) ; Leg ornament made of bamboo	Naga Banpara	
67.	4834	Bangle	Bangles (2) — made of lead, dia. 6.5 cm.	Naga Banpara 1876	Chief Commissioner of Assam on 1876
68.	10873	Ear-ring	Brass ear-ring, lt. 2.4 c.m.	Assam	Presented by the Director of L.R.R.
69.	1887	Ear ornament	Ear ornament — made of cane	Angami Naga Naga Hills	
70.	9318	Ear ornament	Bone made Ear ornament	Naga Naga Hills 1902	Presented by Brig. General P. Leach
71.	8614	Ear-ring	Ear-ring — made of goats hair and beads	Angami Naga Naga Hills	
72.	11616	Armlet	Armlet — made of metal	Angami Naga Naga Hills	



Sl. No.	Acc No.	Name	Description	Community	Source
73.	1526	Armlet—	Armlet — made of cane	Angami Naga Naga Hills	
74.	11649	Ornament	Breast ornament	Angami Naga Naga Hills	
75.	10483	Armlet	Armlet — made of cane	Angami Naga Sibsagar, Assam	Purchased from Dy. Commissioner in 1908
76.	4883	Armlet	Armlet — made of cane	Thangkul Naga Naga Hills 1876	Lieutenant J. Gregory
77.	2985	Ornament	Breast ornament — made of wood, decorated with goats Hair and rows cowri shell. Lt. 24.8 cm.	Thangkul Naga Naga Hills	
78.	11619	Ornament	Breast ornament — made of wood, 'Thatsu' (Lac)	Thangkul Naga Naga Hills	
79.	7188	Wooden head	Wooden head gear — made of wood used as ornament	Thangkul Naga Naga Hills	
80.	4853	Bead string	Bead string — made of glass Bead	Thangkul Naga Naga Hills	
81.	1534	Brass chain	Brass Chains with hair	Thangkul Naga Naga Hills	
82.	7249	Merani	Ear ornament — made of metal	Thangkul Naga Naga Hills	
83.	1534	Brass chain	Brass chain	Thangkul Naga Naga Hills	
84.	8439	Ornament	Ear ornament — made of wood Dia. 4 cm.	Thagkul Naga Naga Hills	
85.	2992	Ornament	Ear ornament — made of brass, L. 12.2 cm.	Thagkul Naga Naga Hills 1867	Major H. Paban
86.	8614(2)	Ornament	Ear ornament — made of tin Dia. 5.2 cm.	Naga Hills	
87.	9276(1)	Ornament	Ear ornament — made of tin Dia. 5.7 cm.	Angami Naga Naga Hills	



Sl. No.	Acc No.	Name	Description	Community	Source
88.	1547	Bracelets (?)	Brass Bracelets	Angami Naga Naga Hills	
89.	3076	Ornament	Ear ornament — made of bamboo shel, beads Lt. 5.7 cm.	Chang Naga Naga Hills	
90.	1650	Ornament	Ear ornament — made of seeds	Naga Naga Hills	
91.	10873	Ornament	Brass ear ornament	Naga Hills	Presented by the Director of L. R. Agri Assam
92.	1649	Ornament	Ear ornament — made of wood Lt. 15.5 cm.	Nanpara Naga Naga Hills	
93.	206	Ornament	Ear ornament — made of wood	Naga Naga Hills	
94.	1654	Bead String	Bead string — made of seed	Naga Naga Hills	
95.	12110	Disc.	Bayop ; metal disc used by as Waist ornament (1)	Adi Arunachal Pradesh 1965	Received from An.S.I. in 1965
96.	12111	Bracelet (2)	Brass bracelet (2)	Adi Aunachal Pradesh 1965	Received from AN.S.I. in 1965
97.	12113	Bracelet (1)	Brass bracelet (1)	Adi Arunachal Pradesh 1965	Received from AN.S.I. in 1965
98.	12112	Bracelet (1)	Brass bracelet (1)	Adi Arunachal Pradesh 1965	Received from AN.S.I. in 1965
99.	1542	Wristlet	Brass wristlet (1 Pair)	Angami Naga Nagaland	
100.	3075	Ornament	Ear ornament — made of seeds (1 Pair)	Angami Naga Nagaland 1872	Collected by S.E. Peal in 1872



Sl. No.	Acc No.	Name	Description	Community	Source
101.	7184	Ornament	Ear ornament — made of horn and hair (1 Pair)	Angami Naga Nagaland	
102.	10479	Necklace (1)	Necklace (1)	Angami Naga Nagaland 1908	Purchased from Dy. Commissioner 1908
103.	11673	Necklace (1)	Necklace(1)	Angami Naga Nagaland	
104.	10263	Armlet	Ivory armlet (1)	Angami Naga Nagaland	
105.	10264	Armlet	Ivory armlet (1)	Angami Naga Nagaland	
106.	1659	Bangles	Cane bangles (1 Pair)	Angami Naga Nagaland	
107.	6923	Armlet	Armlet of hair and cotton thread Dia. 8 cm.	Thangkul Naga Nagaland 1886	Purchased by Mr. Oldham, Geological Survey
108.	7270	Girdle	Brass girdle	Garro Garo Hills	
109.	7268	Necklace (1)	Necklace	Garro Garo Hills	
110.	7273	Ornament	Ear ornament (1 Pair)	Garro Garo Hills	
111.	1068	Ear Ring	Ear ring (3 pcs.) small	Garro Garo Hills	
112.	7266	Bangles	Bangles (metallic 6 pcs.)	Garro Garo Hills	
113.	7263	Bangles	Brass ware bangles (6 pcs.)	Garro Garo Hills	
114.	1968	Ear Ring	Ear ring (big, 6 pcs.)	Garro Garo Hills	
115.	12118	Necklace	Necklace made of beads (1) 'Tadak'	Adi Arunachal Pradesh 1965	Received from A.N.S.I. in 1965
116.	NIL	Beads	Beaded necklace (4 pcs.)	Adi Arunachal Pradesh	



Sl. No.	Acc No.	Name	Description	Community	Source
117.	12127	Beads	Beaded necklace (fitted to the female model, 1)	Khasi Khasia & Jaintia Hills	
118.	90.92	Necklace	Necklace of multicoloured beads	Lower Konyak dcutta Naga 1990	Purchased from Mrs. Milada Ganguli
119.	90.93	Arm Band	Arm-Band of multicoloured beads	Lower Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
120.	90.94	Necklace	Beaded necklace with a Pendant of three brass leads	Upper Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
121.	90.95	Bracelet	Two heavy bracelet of solid brass	Upper Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
122.	90.96	Bracelet	1 pair brass bracelets, embossed	Upper Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
123.	90.97	Armlet	Brass armlet	Lower Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
124.	90.98	Ear Ornament	Ear ornament of grass trassels	Lower Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
125.	90.99	Ear Ornament	Ear ornament of bamboo splits	Rongmai Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
126.	90.100	Armlet	Armlet (1 pair) of cane ornamented with yellow orchid skin	Lower Konyak Naga Calcutta 1990	Purchased from Mrs. Milada Ganguli
127.	7533	Wooden Comb	Wooden comb L.-7.3 cm., Br.-5.7 cm.	Shimla 14/12/1892	Collected by Thomstorn in 1892



Sl. No.	Acc No.	Name	Description	Community	Source
128.	7536	Wooden Comb	Wooden comb L.-13 cm., Br.-3.5 cm.	Shimla 14/12/1892	Collected by Thomstorn in 1892
129.	3314	Ear ring	Ear ring ; made of conch shell	Shibsagar, Assam	Collected by Thomstorn in 1892
130.	7541	Necklace	Made of metal	Shimla	Collected by Thomstorn in 1892
131.	9279	Ornament	Breast ornament, decorated with bones and goats hair L. 23.5 cm.	Naga Naga Hills	Presented by H.E. Lord Curzon
132.	2207	Ear ring	Ear ring — made of wood, Dia. 3 cm., Cir.-18.2 cm.	Lushai Lushai Hill, Assam	
133.	4815	Bracelet	Made of brass, L. 11.7 cm., Dia. 6 cm.	Naga Naga Hills 1876	Received on 1876
134.	1660	Ear Ornament	Ear ornament — made of cane L. 4 cm.	Naga Naga Hills	
135.	92.09	Soma	Comb, made of splitted bamboo	Bhutia Podong, Sikkim	Dawa Bhutia 1992
136.	92.10	Bangle	Bangle — made of silver and copper	Bhutia North Sikkim 1992	Samtem Bhutia 1992
137.	92.11	Jamu	Jamu — 1 pc. Finger ring — made of silver	Bhutia North Sikkim 1992	Samtem Bhutia 1992
138.	92.12	Jamu	Jamu — 1 pc. Finger ring — made of silver	Bhutia North Sikkim 1992	Samtem Bhutia 1992
139.	92.13	Jamu	Jamu — 1 pc. Finger ring — made of brass	Bhutia North Sikkim 1992	Samtem Bhutia 1992
140.	92.14	Jamu	Jamu — 1 pc. Finger ring — made of brass	Bhutia North Sikkim 1992	Samtem Bhutia 1992



Sl. No.	Acc No.	Name	Description	Community	Source
141.	92.17	Locket	Made of designed brass piece (1 Pair)	Bhutia North Sikkim 1992	Samtem Bhutia 1992
142.	92.18	Locket	Made of designed brass piece	Bhutia North Sikkim 1992	Samtem Bhutia 1992
143.	92.19	Locket	Made of silver (1 pair)	Bhutia North Sikkim 1992	Samtem Bhutia 1992
144.	92.20	Bangle	Made of silver and copper	Bhutia North Sikkim 1992	Samtem Bhutia 1992
145.	92.21	Fim	Fim ; beaded chain, made of wooden beads	Bhutia North Sikkim 1992	Samtem Bhutia 1992
146.	92.30	Ornament	Ear ornament ; made of brass and number of coloured stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
147.	92.32	Bangle	Bangle, made of brass and coloured stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
148.	92.33	Finger Ring	Finger ring, made of silver and stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
149.	92.34	DIM	Wristlet, made of silver	Bhutia North Sikkim 1992	Samtem Bhutia 1992
150.	92.35	Diu	Wristlet, made of silver and Stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
151.	92.38	Diu	Wristlet, made of silver and stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
152.	92.40	Diu	Wristlet, made of silver and stones	Bhutia North Sikkim 1992	Samtem Bhutia 1992
153.	92.44	Diu	Wristlet, made of silver	Bhutia North Sikkim 1992	Samtem Bhutia 1992



Sl. No.	Acc No.	Name	Description	Community	Source
154.	4814	Head ornament	Made of brass	Naga Naga Hills 1876	Presented by Chief Commissioner of Assam
155.	12107	"VK"	Waist belt — made of splitted cane, Dia. 30 cm.	Adi Arunachal Pradesh	
156.	12137	Upaila	Necklace — made of red coloured glass beads.	Khasi Khasia & Jaintia Hills	
157.	10259				
158.	7530	Ear ornament	Ear ornament — made of red coloured cane, L. 4 cm.	Nagaland	
159.	11650	Necklace	Necklace — made of wild boar tusk and cane spipes.	Sema-Naga Nagaland	
160.	5793	Penis-Ring	Made of bone, L. 2.5 cm., Dia. 2 cm.	Naga Nagaland	
161.	2991	Ornament	Ear ornament — made of wood L. 8.5 cm.	Naga Nagaland	
162.	11612	Gaultlet	Cowrie gaultlet, L. 14 cm.	AO - Sema Naga Nagaland	
163.	7178	Ornament	Bar ornament — made of plaited cane, Dia 5 c.m.	Boratuchang Naga Nagaland	
164.	5118	Ornament	Leg ornament — made of shells, Lt. 36 c.m.	Naga Nagaland	
165.		Armlet	Armlet, made of brass plates and leather, Dia. 6.5 cm.	Angami Naga Nagaland 1876	Presented by Chief Commissioner of Assam
166.	12109	Waist Belt	Waist belt — made of brass Plates and leather L. 60 cm.	Adi Arunachal Pradesh	
167.	8607	Chaneki	Made of splitted bamboo Lt. 21.3 cm., Br. 12.8 cm.	Naga Jorhat, Assam	



# GOVINDADEVA : A DIALOGUE IN STONE

(Review Article)

R. Nath

GOVINDADEVA : A DIALOGUE IN STONE, edited by Margaret H. Case, photographs by Robyn Beeche (Indira Gandhi National Centre for the Arts, New Delhi 1996) 24 × 30 cms., pages xxii + 305, 27 figures (of plans, sections etc. including maps) 227 black-and-white plates and 23 inscriptions, cloth-bound Price Rs. 2000/-. Produced in a superb format with excellent drawings by professional architects and photographs by professional photographer, in high quality paper and brilliant printing by Vakils, this beautiful work fully documents the data on Śrī Govinda Devajī (SGD) and His monumental temple at Vrindaban (built between 1576 and 1590 A.D.). The volume has been very well planned, in three sections, respectively on Architecture, History and Rituals (each containing a number of articles). The text is preceded by a suitable Introduction by Kapila Vatsayan and followed by a conclusion by Shrivatsa Goswami.

It is a pity that the high quality of its production is not matched by its contents which are of an average quality, sometimes intellectually so poor as to warrant the justification of their inclusion in this prestig-

ious work. As some basic question of this discipline are involved, it must be studied in some details.

*Nalini Thakur's* is the first and the leading article. Its title : 'The Building of Govindadeva' shows that she would deal with the architecture of the temple of SGD built by Rājā Mānsingh Kachhwāhā (1576-90) which, in her own words, "is the largest Hindu temple ever built" (p. 11). She devotes the first page of her article to a short discussion on 'Vraja' and 'Bhakti', and second to the Mughal state and its patronage to Architecture. She refers on the third page of her article to the red sandstone temples of Vrindaban, viz. Śrī Gopi Nath (SGN), Śrī Jugal Kishore (SJK), Śrī Radha Ballabh (SRB), and Śrī Govinda Devaji (SGD), which were built during the reigns of Akbar and Jehāngīr. She notes that "All these temples had three aligned spaces : inner sanctum (*Garbhagrha*), anterior platform (*jagmohan*) and long hall with a high vaulted ceiling (*mandapa*)" (p. 16). So, in her view, *jagmohan* was a platform situated in front of the sanctum and it was different from *mandapa* and was placed between sanctum and *mandapa*. This is a new discovery of her own, and a



revolutionary definition of *jagmohan* in the context of the Vrindaban temples. In classical Nāgara temples of this region, the space between *garbhagr̥ha* and *maṇḍapa* is called *antarāla*. It is, of course, *maṇḍapa* which is termed *jagmohan* in the Kaliṅga school, precisely in Orissa from where this term has been introduced into the Vrindaban region. To which school of temple architecture shall we place the SGD fundamentally, is a question she has altogether ignored. That is why, she has erred in placing all these five temples, viz. SMM, SGN, SJK, SRB and SGD together in one class, though, stylistically, they belong to *four distinct classes*. For example, the temple of SGD is altogether different from the temples of SMM, SGN, SJK and SRB on account of its *pārśvālindas* (side aisles) alone !

She proceeds on to introduce the site of the SGD and then to the temple proper. She notes on the next page : "In the north-west corner (of the site) stood the original temple built for Govindadeva" (p. 18). She does not reveal the source of this important identification. Is it her own research ? where has she lifted this idea from ? It is noteworthy that a full-fledged research project is being conducted since 1991 on the Kṛṣṇa temples of the Braja region belonging to the reigns of Akbar and Jehangir (c. 1556-1627), and its data is being used, or rather misused, without due acknowledgements.

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The article is too brief to introduce the reader to the temple, or even to introduce him to its basic features : constructional, structural and decorative ; rather than a scholarly article, it more appears to be a Presidential Address to a symposium or seminar held on the SGD. She was given the necessary material, e.g. 100 black-and-white plates, 2 maps and 15 drawings of plans, sections and elevations (the data collected for the above-mentioned research-project) to make an 'elephant', but she has made a 'mouse' of it and she has not used 71 illustrations (Nos. 2.45 to 2.115) in her text, and these illustrations, appended to her article under the fascinating, and equally elusive, heading : 'Parikramā of the Govindadeva Temple' are accompanying her article like ticketless travellers on an Indian train !

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is like calling Swami Vivekanand a 'Hindu Faqir'. It is also wrong technically, as it is not only a 'light-shaft' but an 'air-shaft' too. *Jharokhā* is the correct term which should have been used. It must be noted that the *Jharokhās* of SGD constitute one of the *most beautiful series of jharokhās* in the whole of Mediaeval India and it is unfortunate that by branding it a 'light-shaft', she has killed a beautiful idea.

A tentative list of the wrong terms she has used in her article and illustrations of this chapter are as follows :

Fig. No.	Term used in the Caption	Correct Term
2.41	Window	<i>Jharokhā</i> (it has pillars, <i>chhajjā</i> and roof and, supported on brackets, it projects forward from the wall which a window does not)
2.71		
2.42a	Light-shaft	<i>Jharokhā</i> (it admits not only light but air too and it is a stylistic architectural element, rather than a utilitarian expedient only)
2.42b		
2.61		
2.63		
2.67		
etc.		
2.44	<i>Chatri</i>	<i>Chaukhaṇḍī</i> (See its inscription)
2.66		
2.46	Lotus-Pot	<i>Ghaṭa-Pallava</i>
2.51	Bay	<i>Pārsvālinda</i> (correct English term)
2.52		

Fig. No.	Term used in the Caption	Correct Term
2.73		is 'Aisle')
2.105		
to		
2.108		
etc.		
2.53	Mezzanine	<i>Duchhatti</i>
2.92		
2.95		
2.96		
2.59	String-courses	These are mouldings of the ' <i>Pīṭha</i> ' and ' <i>Maṇḍovara</i> ' of the Hindu temple
2.97	Niche	Cusped open, window (niche is ' <i>rathikā</i> ,' or ' <i>ālāya</i> ' which is closed and may contain anything)
2.98		
2.101	Floral Motif	Honeysuckle (stylized Mughal)
2.112	Central Vault	Cross-vault (as it is at Qal'ā-i-Kuhnā)
2.87	Detail of Figure	<i>Kīrttimukha</i>
2.88	Ceiling	Geometrical Design from Fatehpur Sikri
2.89	Detail of Ceiling	Geometrical Design from Fatehpur Sikri



2.106	South Bay	Stalactite from Fatehpur Sikri
2.114	Jagmohan vaulting	Corbelled Pendentives

She does not do justice to the subject. It is the apex-article of the volume, but it is woefully deficient and it does not 'inform', 'enlighten' or 'impress'. It is suprising, who commissioned her to do this leading and the most important article and on what grounds, she being only a practising modern architect, who has reportedly never written a word before on Historical Architecture. This is also a reflection on the quality of editing.

*Shrivatsa Goswami's* article 'The iconography of Govindadeva Temple' (pp. 69-77) documents almost the complete data on the sculptures of the temple of SGD, both sacred and mundane. With the help of 98 plates, the article illustrates *Loka-Jīwana* of the Braja region depicted in the temple adequately. It is extremely informative and useful. However, it remains to be identified which of these sculptures belonged to the original temple of Rājā Mānsingh and which were later restored by Sawāī Rājā Jaishingh, c. 1732, when he was having a suburb of his own, viz. Jaisinghpura at Vrindaban.

George Michell in his article: 'The Missing Sanctuary' (pp. 115-122) tries to reconstruct the temple of SGD to its original form and fabric. His surmise that some parts of the temple, e.g. "the towers of the jagmohan" (he means *śikharas* or *maṇḍapa* superstructure) and towers "of the two sub-shrines" (he means subsidiary *śikharas*), "and the pin-

nacles, *chhatrīs* and other types of superstructures intended to mark the upper corners of the *mahā-maṇḍapa*" (p. 116) were never finished, is misconceived and wrong. The temple was completed and finished in all respects and it was only after that it was, and it could be consecrated, the deity installed and invoked (*Prāṇa-Pratisthā*), and worship began. This has been emphatically recorded in the *Śrī-Govinda-Mandirāṭakam*, written by Jīva Goswāmī and inscribed in the temple itself:

कुर्वन्नुद्यममत्र दूरामिव यः पूरक्रियं निर्ममे ॥

(from Pt. Bahura's article in the same work, p. 202)

(By industrious exertions= उद्यम and zeal, the temple was completed and finished). All other contemporary records: epigraphic and archival, fully corroborate the fact that the temple was completed and no part of it remained unfinished. Michell is not aware, perhaps, that the ritual of consecration can not be performed until and unless the temple is completely finished because, by it, the deity is invoked to come and reside in this abode which is an architectural replica of the complete human body and the deity cannot be invoked to reside in an '*aṅga-bhaṅga*' (with missing parts) house, i.e. the temple. The basic thesis of Michell that it was probably not completed all the way upto its *āmalaka* finial and "parts may never have been finished" (p. 116) is altogether wrong, as without *kalaśa* finial, superimposing the the *garbha-gr̥ha*, the very consecration ceremony of the temple cannot be held. *Kalaśa* finial is inseparably associated with the sanctum and it is indispensable for the



worship. That is why it is termed as 'Śīrsa' (head) and only an American or European can contend that a *headless temple* could be consecrated to Hindu worship.

Unfortunately, the whole plan of the temple has been misconceived by Michell. Its was a *Kailāśa-Mahāmeru plan*, suitably and harmoniously adopted and adjusted in the 16th century situation in which the temple was built. On the *talaçchanda* (horizontal axis), it had *mukha-catuṣkī* (entrance porch), *ardha-maṇḍapa* (intermediary hall), *mahā-maṇḍapa* (nave ; main hall) with *pārśvālindas* (side aisles), *maṇḍapa* (front hall called *jagmohan*), *antarāla* (ante-chamber) and *garbha-gr̥ha* (sanctum with the deity). The *garbha-gr̥ha* with its *śikhara* component has entirely dwindled but it must have extended well beyond Rambhāvatī's *chaukhaṇḍī*. The present *dwāra-śākhā* (door-jamb) is on the *antarāla* and, quite likely, these jambs are later. In any case, this is not *garbhagr̥ha* but an ante-chamber to *garbhagr̥ha*. The size of the non-existent *garbhagr̥ha* can be exactly calculated from the size of the *mahā-maṇḍapa*, both being in a particular proportion, as the temple both on the *talaçchanda* and the *ūrdhvaçchanda* has drawn fundamentally on such north Indian (*Nāgara*) *Vāstu* text of the Viśwakarmān school as the *Aparājitapṛcchā* (which was compiled in the late 12th century A.D. :

वेदरामाब्धि प्रिवेदाः पट्टत्रिंशदिर्विभाजते ।  
भ्रमैर्विना सम्रमो वा कर्तव्यः सर्वकामदः ॥  
करोप्रितिरथे चैव द्वे द्वे शृङ्गे पञ्चाण्डकाः ।  
द्वादश चोरःशृङ्गाणि प्रत्यङ्गानि तथाहृष्ट च ॥  
कर्ण्या तिलकानि कुर्यात्कैलासो नामेता भवेत् ॥

Its exact proportions may be debatable

in accordance with the type of the *Vāstu*-temple to which it corresponded, but in any case, and without any doubt, this *garbhagr̥ha* was *caturasra* (square). The Hindu sanctum is a perfect cube and its essential plan on the *talaçchanda* is square. Michell's surmise that "the outer shape of the *garbhagr̥ha* was almost certainly octagonal" (p. 117) is basically wrong. It was square and it could be *triāṅga* curvilinear, having a *pratiratha* each in between *karnas* and *bhadrās*. This is not comparable to such temples as SMM and SGN, as he wrongly does. The SGD does not belong to their class but to the *Nāgara* *Kailāśa-Mahāmeru*, with altogether different plan, elevation and architectural features. Michell blundered when he decided that SGD and SMM-SGN : "all clearly belong to the same group" (p. 118). They do not. SGD belongs to its own class. SMM and SJK belong to a different class ; and so do SRB and Śrī Harideva of Goverdhan ; and finally SGN also to a different group. There are, thus, four types of temples architecturally.

He has reconstructed its ground plan Figure 4.1 with this wrong hypothesis and it is, therefore, incorrect and misleading. It must be reiterated that the *garbhagr̥ha* was essentially square and not octagonal and it must have extended at least 24 feet (7.32 m) westwards, from the present modern wall, to be in proportion and conformity with the nave. Naturally its *śikhara*, probably of the *Pañcāṇḍaka Latina* type, with *śṛṅgas* and *uruk-śṛṅgas*, must have risen higher than the subsidiary *śikharas* : two on the shrines of Vrindā and Yogamāyā, one on the *antarāla* and one on the *mahā-maṇḍapa* (nave), to make up a majestic and beautiful *Pañc-*



*ratna* (five-jewelled) superstructure. His conjecture (अटकल) based on a wrong perception of "mathematical and geometric qualities of the building plan" fits in this context only like a round pebble in a square hole.

He has traced the 'Sources and Influences' to the Mughal architecture of Agra and Fatehpur Sikri correctly. But the mental acrobatics he performs under the heading: 'Demolition or Desecration' is altogether redundant. We know for certain from the *Ma'āthir-i-'Alamgīrī* of Sāqī Must'ad Khān (tr. J. N. Sarkar, Calcutta 1947, pp. 50-52) that on 8th April, 1669 Aurangzeb issued a general decree for demolition of temples throughout his Empire: "His Majesty, eager to establish Islam, issued orders to the *governors of all provinces to demolish the schools and temples of the infidels and with utmost urgency put down the teaching and the public practice of the religion of these misbelievers.*" It was in consequence of this decree that temples of Banaras, Ayodhya and Mathura, including Vrindaban, were demolished and it was in consequence of this that the *vighraha* of SGD had to be removed (as described in details in the article on SGD's Itinerary in the same volume, pages 160 to 183). It must be acknowledged however, to do full justice to Michell, that rather than a 'careless' operation, this was a 'careful' demolition of the *mūlaprāsāda* (the sanctum along with the *śikhara*) only.

Identification of the original fabric of the building is the first requisite of the study of historical architecture and the scholars generally blunder in interpreting a 19th century restoration work as a 16th century phenom-

enon. This is a very common error. *John Burton Page* studies (pp. 123-127) these Kṛṣṇa temples of Vrindaban and Śrī Harideva of Goverdhan from this point of view and, analysing the basic architectural features of each one, scientifically, he traces the course of repairs and restorations in each case in order to make a tangible idea of its original form. Though small, his is an extremely learned and useful article, though the title is a little startling. What he wants to convey, precisely, is that a composite style of architecture had already come into being under the liberal patronage of the Mughals and both exotic and indigenous things had already been absorbed in this style and it was *in this composite style*, by and large, that these temples were built. There was no conscious effort to bring these two elements together all of a sudden at Vrindaban, and nobody can question the veracity of his statement. This is true and this is it.

*Irfan Habib's* article: 'A Documentary History of the Gosa'ins (Goswamis) of the Chaitanya Sect at Vrindaban' (131-159) compiles the data from Persian documents (e.g. land-grants issued by the Mughal Court in favour of the temples or their *sewāyats*) related to the Gosa'ins. It is in the form of an "Alphabetical List of the Gosa'ins and Mendicants of the Chaitanya Sect at Vrindaban, sixteenth century to 1725." Erudite and exhaustive, it is an important historical document on the sect, and fully justifies the title. *Monika Horstmann* compiles a separate list of the custodians (*sewāyats* or *pūjā-adhikārīs*) of SGD from 1643 to 1743, in the chronological order, as the deity travelled from Vrindaban to Jaipur. She also lists the



supporting documents, viz. the *paṭṭās* and *parvānās* which, referred to also in two other articles of R. Nath and G. N. Bahura as they are, should have been reproduced in the book. These archival documents are indispensably related to the history of the SGD and it is unfortunate that the editor did not append them in original.

The article on SGD's *itinerary* has been drastically altered and abridged. In fact, the editor has eliminated all flesh and reduced it to a mere skeleton of bones (कंकाल) of the original article, dropping not only the Sanskrit and Hindi extracts of the text, but also very necessary and illustrative archival documents which were given in appendices in the original article. Consequently, it has lost its entire form and figure. Its language has been so overwhelmingly changed that it betrays more the personality of the editor, rather than of the author and it has altogether lost its individuality, force of expression and points of emphasis. One wonders if an editor is engaged to kill the originality of the article, interpolate her own references and take entire liberty with the text.

Most regretful of this editorial exercise is the almost total side-tracking of the discussion on the *Metamorphosis of the Deity and the Temple* during this period : how the classical four-armed icon of Viṣṇu became transformed into a two-armed folk, human being, viz. Kṛṣṇa, and how the Sastrić śikhara temple became transformed into a simple house, without the former's architectural paraphernalia. This was an event of singular importance in the study of *Bhakti* and its

impact on the life of the people, and the arts of the region. This was a thrust of the article which has been destroyed by the editor, probably owing to ignorance.

Pt. G. N. Bahura in his article on Śrī-Govinda-Gāthā meticulously discusses the patronage accorded to SGD by the Kachhwāhās of Ajmer and Jaipur, right from Rājā Mānsingh who built the Great Temple of SGD at Vrindaban (1576-90). His statements are duly supported by Sanskrit and Bhāshā extracts from contemporary literature, inscriptions and archival documents. The Kachhwāhās were, in fact, instrumental in the transfer of the image of SGD from Vrindaban to Jaipur (c. 1669 to 1727) (described in the article on SGD's Itinerary). They afforded the necessary protection and patronage, and finally installed SGD as the presiding deity not only of their *House*, but also of their *State* and their *Capital*. Pt. Bahura's is the most learned, informative and enlightening article in this work.

Catherine Asher describes other temples built by Rājā Mānsingh elsewhere in the Mughal Empire under the title : "Kachhwāhā Pride and Prestige : The Temple Patronage of Rājā Māna Simha." The subject required a thorough knowledge of Bhāshā and Sanskrit ; Vāstu-Texts ; Kṛṣṇa cult of *Bhakti* ; and the Culture which all went into the making of these temples. Such comments of her as "G. N. Bahura and other informants tell me that...", besides not being in good taste, show that she is hardly acquainted with the subject, which seems to have been somehow imposed upon her, and it is more an exercise in self-exaltation than



self-expression. It hardly comes to the level of original sober research. *Asim Krishna Das's* erudite and fully documented article on the yearly festival of SGD, and *Chandramani Singh's* on 'Bhoga, Pūjā, Utsava and Śṛṅgāra of SGD' compile useful data on the rituals.

There are four articles on Temple Architecture in this volume but, amazingly, there is not even a single reference to the *Vāstu*-texts which laid down precise *theory* for the construction of the Hindu temple. Is it that the temple of SGD is completely detached and cut off from this ancient theory of the Hindu temple, and does it not draw on it at all? where did lay the roots of this great temple, or has it grown in a vase (गमला), without roots into the soil? Probably, the smart, English-speaking, mostly white, authors of these articles do not know that such a theory exists and it is indispensably relevant to this study. It is on these counts that this volume appears to have been hijacked by them.

A word must be said on the *System of transliteration* which has been followed in the book. The editor has used Sanskrit diacritical marks with the popular place names and she has written Agra as 'Agarā', Alwar as 'Alavara', Amer as 'Āmera', Bihar as 'Bihāra', Gujarat as 'Gujarāta', Gwalior as 'Gvāliyara', Jaipur as 'Jayapura', Patna as 'Paṭanā', Punjab as 'Punjāba', and Rajasthan as 'Rajasthāna', for example. It creates an insuperable confusion, of which she is aware and she does not use diacriticals with some other names of her choice and does not write 'Fatehapura Sikarī', for Fatehpur Sikri, 'Sāmbhara' for Sambhar, and

'Sānganera' for Sanganer, for example. In some cases, she has given correct popular spellings in brackets, e.g. *Mānapura* (Manpur), *Rāṇakapura* (Ranakpur) and *Cittauḍa* (Chittor). Similarly, she has used Sanskritised forms of popular names of persons, e.g. she has written Birbal as 'Bīrabala', Kabir as 'Kabīra' and Todar Mal as 'Todara Mala'. Why then she has not written Akbar as 'Akabara' and Salim Chishti as 'Salīma Čištī'? She writes Rajput as *Rājapūta*, then why not Mughal as *Mughala*? She writes *Maḥala* for Mahal, then why not *Dīwāna-i-Khāsa* for *Dīwān-i-Khāṣṣ*, *Zāta* for *Zāt*, *sawāra* for *sawār*, *jāgīra* for *jāgīr*, *watana* for *watan*, *faramāna* for *farmān* and *jharokhā-darsāna* for *jharokhā-darsana*, and so on? If she has written Man Singh as *Māna Siṁha*, why not Shāh Jehān as *Śāha Jahāna*?? Obviously, no uniform system of transliteration has been followed and she has made a complete hodge-podge of the linguistic presentation of the text.

Or is it that she has discriminated the Hindus against the Muslims and she has used diacriticals only with the Hindus and the Muslims have been spared and their names have been written in their popular forms as Akbar, Jahangir, Shah Jahan and Aurangzeb, without diacriticals? By this standard, 'Agarā' would become Hindu and 'Fatehpur Sikri' would remain Muslim???

'Jagamohan' at Vrindaban is a later mediaeval feature used more in Bhāshā than in Sanskrit and it does not need any diacritical marks unless one is too tempted to impose a scholarly character upon it and write it as 'Jagamohana'. 'Chhat' is a *deshi* word and it is extremely confusing to write it as 'Čata'.



Only Govinda knows how 'gumbadākār' of the original could be reduced by the learned editor to 'kumbhadākāra'? Is 'gumbad' (dome) a 'kumbha' or 'kumbh' (watervase or pitcher), as the editor has preferred to write it?

System of transliteration is just a linguistic tool or method to lead the reader to exact words in order to make a statement intelligible to him. But in this case, it creates confusion and misunderstanding and negatives the very *raison d'être* of using diacritical marks. Who will understand *Çittauḍa*?

Be it as it may, the fact stands out that very sustained effort has been made to Sanskritise the technical terms and the popular names (of places and persons) of history. This system is too confusing to be of any use. The editor does not seem to know that when we write (today, in modern time) on something of the mediaeval period which had grown on the ancient tradition, as is the present case, we are confronted with the use of words from three languages, e.g.

I. Sanskrit terms, eg. *talaççhanda*, *īrdhvaççhanda*, *pīṭha maṇḍovara*, *śikhara*, *śīrsa*, *kalaśa*, *āmalaka*, *padmakōśa*, *mukha-çatuṣkī*, *maṇḍapa*, *antarāla*, *garbhagr̥ha*, *toraṇa*, *kaḍalikā-karaṇa*, *stambha*, *uttaraṅga*, *vitāna*, *ghaṭa-pallava*, *lahara-vallarī* etc. with which we use Sanskrit diacritical marks (including the suffixing 'a' for अ sound);

II. Persian terms as *mihrab*, *īwān*, *aiwān*, *'aqd*, *peshtāq*, *chahār-tāq*, *chār-bāgh*, *gumbad*, *izār*, *mīnār*, *burj*, *riwāq*, *maqbarah*, *raudah*, *maqṣūrah*, *darwāzah*, *dīwān-i-khāṣṣ*, *dīwān-i-'ām*, *hadīth* etc.

with which we use Persian diacritical marks which do not have suffixing 'a' mark as it is in Sanskrit; and

III. Vernacular (*bhāṣhā*) or *deshī* words, popular names of persons and places and such technical terms as *āṅgan*, *pol*, *paur*, *poli*, *osārā*, *dyodhī*, *dālān*, *duchhattī*, *chaubārā*, *atārī*, *koṭhā*, *chowkī*, *jhajjharī*, *chhakkā*, *toḍā*, *chhajjā*, *bānglādār*, *ladāo*, *gharokhā*, *chhatrī*, *chhaparkhat*, *gaukh*, *jhālar*, *jālī*, *chhat*, *chhappar*, *khaprel*, *chandovā*, *hindol*, *chaukhaṇḍī*, *bārahdarī* etc. which also do not have suffixing diacritical marks.

This is the only scientific method of transliteration to be adopted in such a work as this. We cannot use Sanskrit diacritical marks with all the three types of words and not the least with popular names of persons and places which would make it look absurd.

Professor Irfan Habib has, therefore, rightly commented on this matter in his article in this book itself: "To restore the Sanskrit forms of personal names would seem both *pedantic and misleading*" (p. 133) (pedant = one who parades his learning, one who is unimaginative, or who unduly emphasizes minutiae (trifles) in presentation; formalist). This is true. Attempt to Sanskritise the text has been made with a view to impose a fake scholarship upon it, explanation given in the Editor's Preface notwithstanding. We must not forget that language is always a vehicle, conveyance and means, and it is not the goal itself. 'Contents' is the primary thing and we must adopt the simplest means to convey it.



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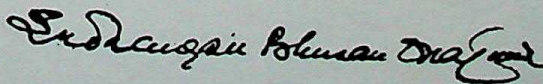
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# Kharoshṭī-Brāhmī Inscriptions written in the Calligraphic style of the Shell Script



Fig.-1



Fig.-2

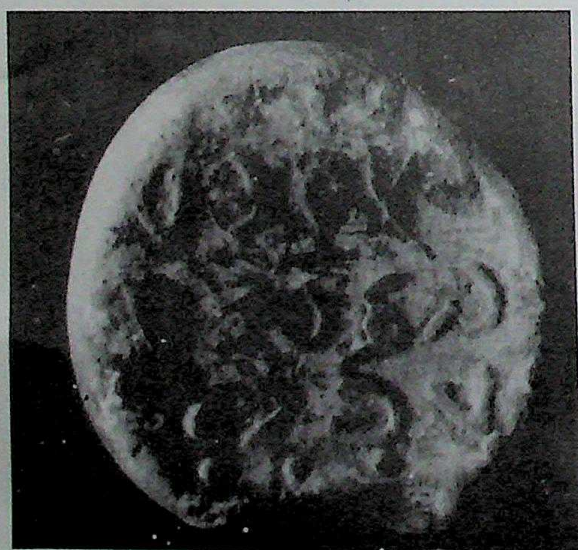


Fig.-3

The period of Introduction of  
Kharoshṭī in Vaṅga



Fig.-1



## Bead industry of Ancient India – A case study at South Bishnupur

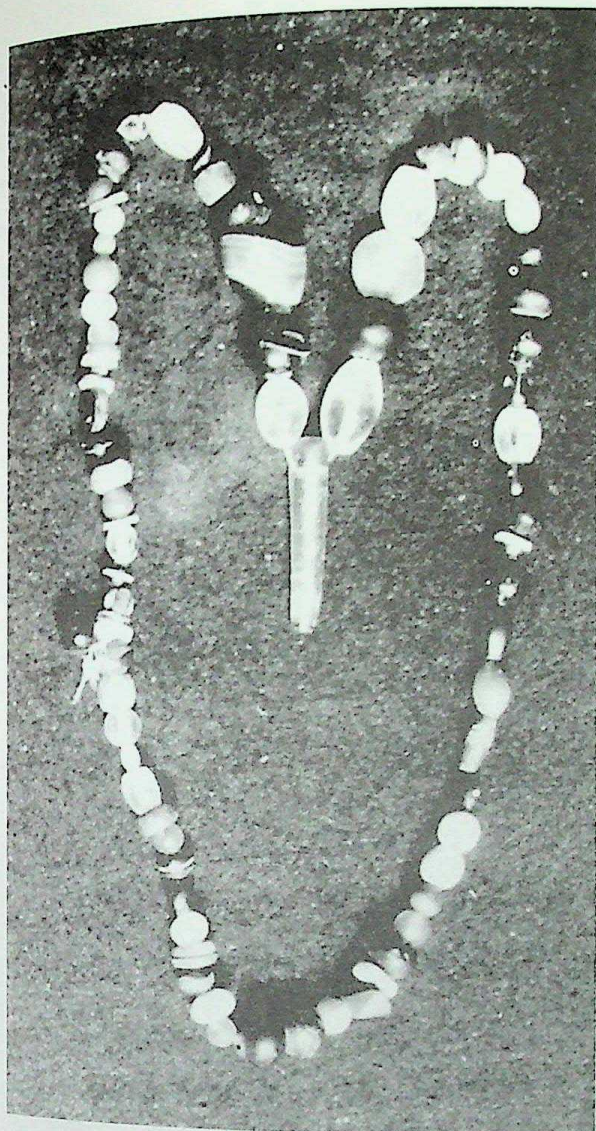


Fig. 1

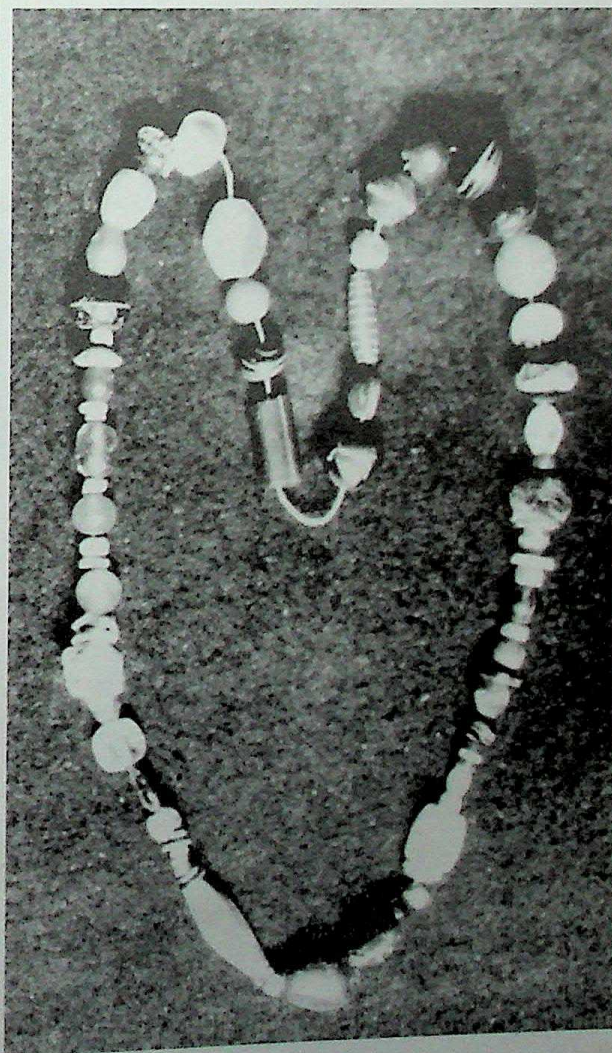


Fig. 2



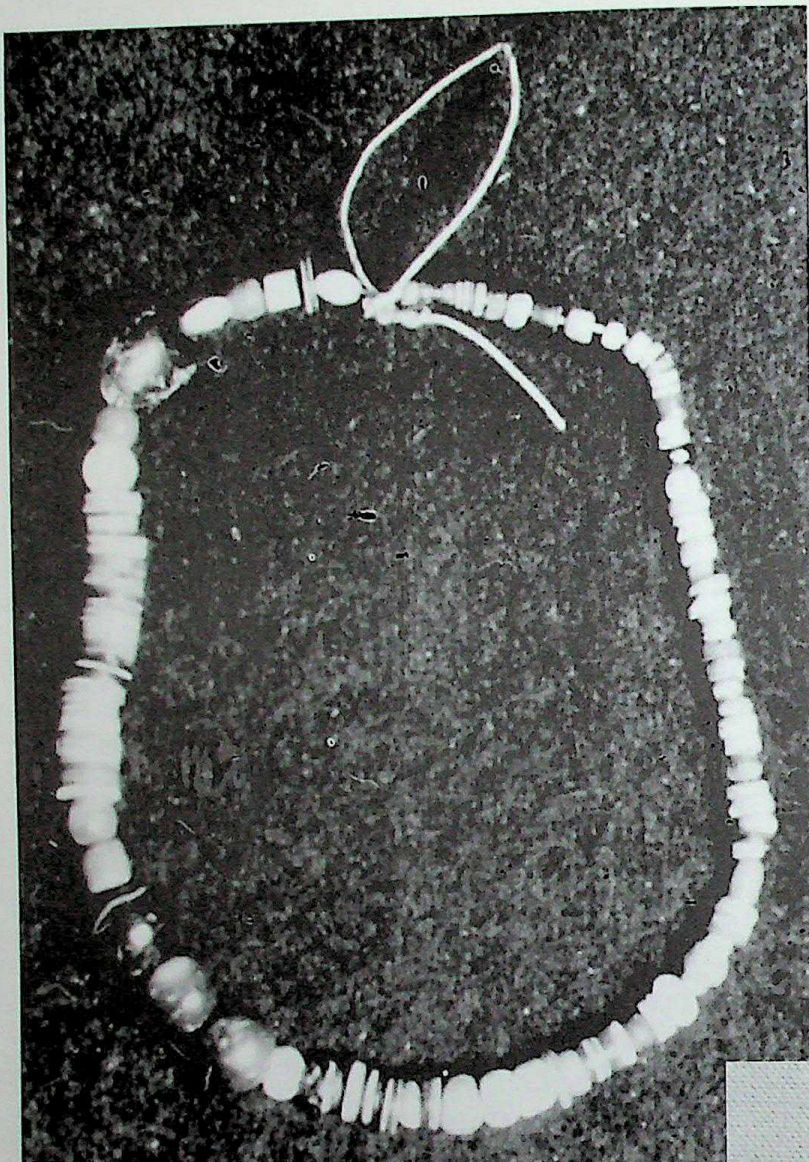


Fig. 3

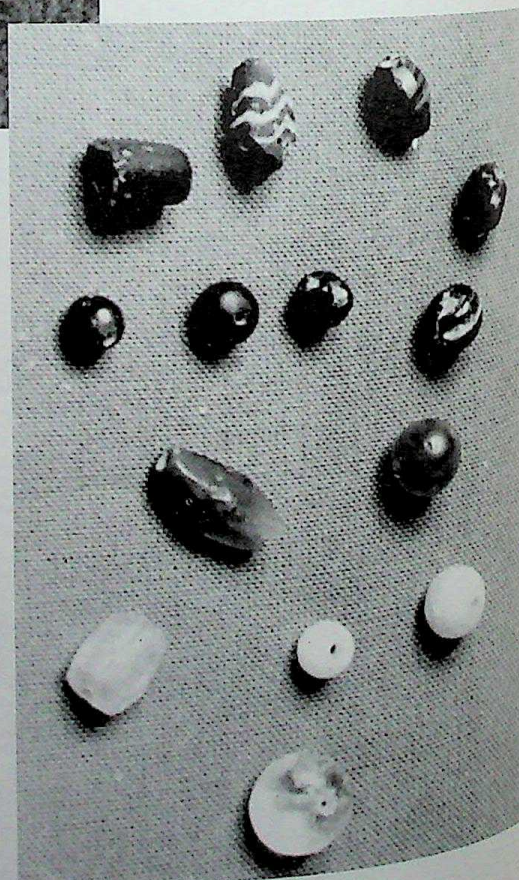


Fig. 4



## Two images of the Goddess Chāmuṇḍā



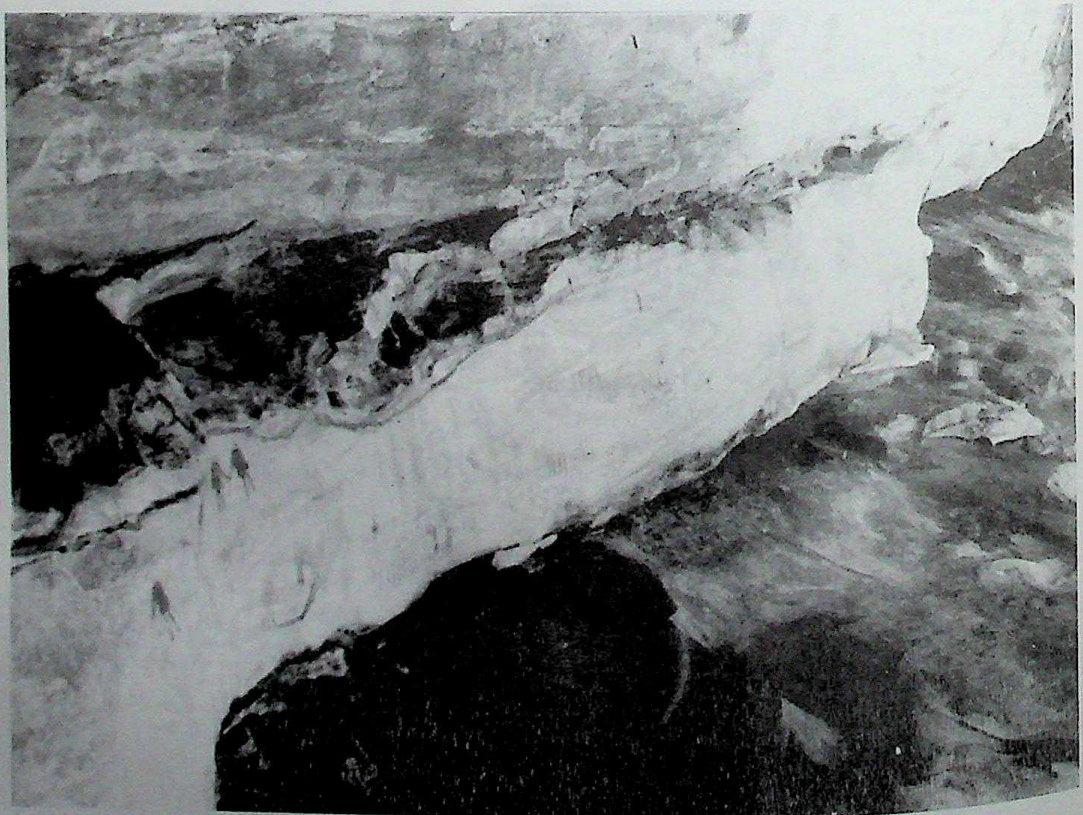
Chāmuṇḍā 1



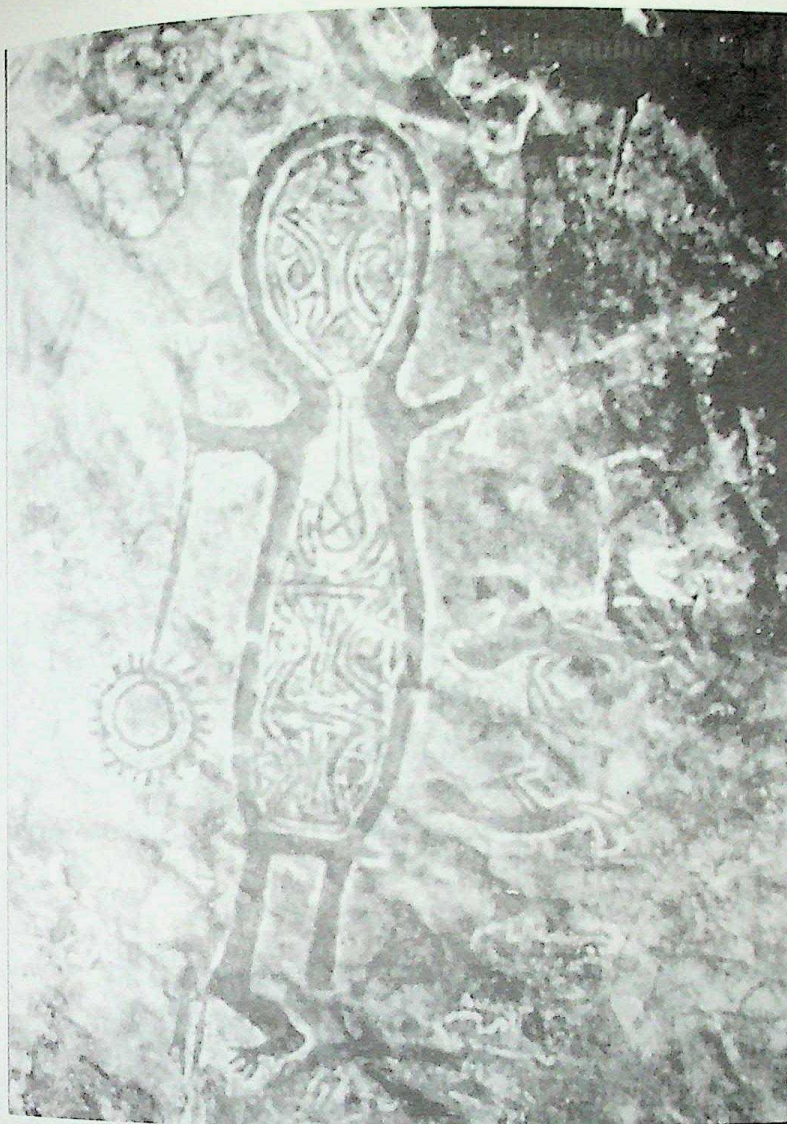
Chāmuṇḍā 2



## Rock Paintings in Kaimur Hills







Paintings in Kaimur Hills

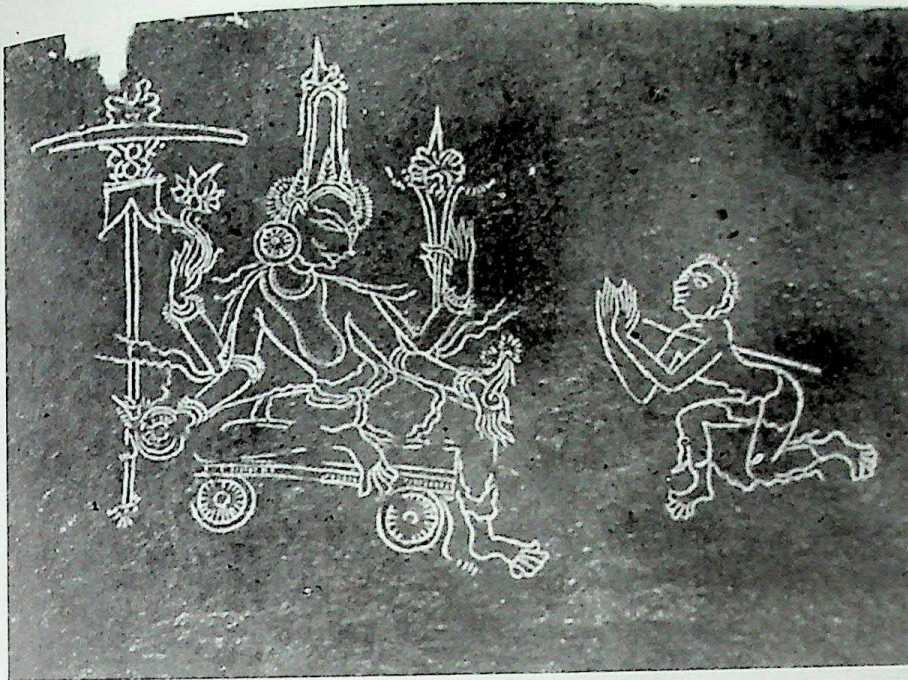




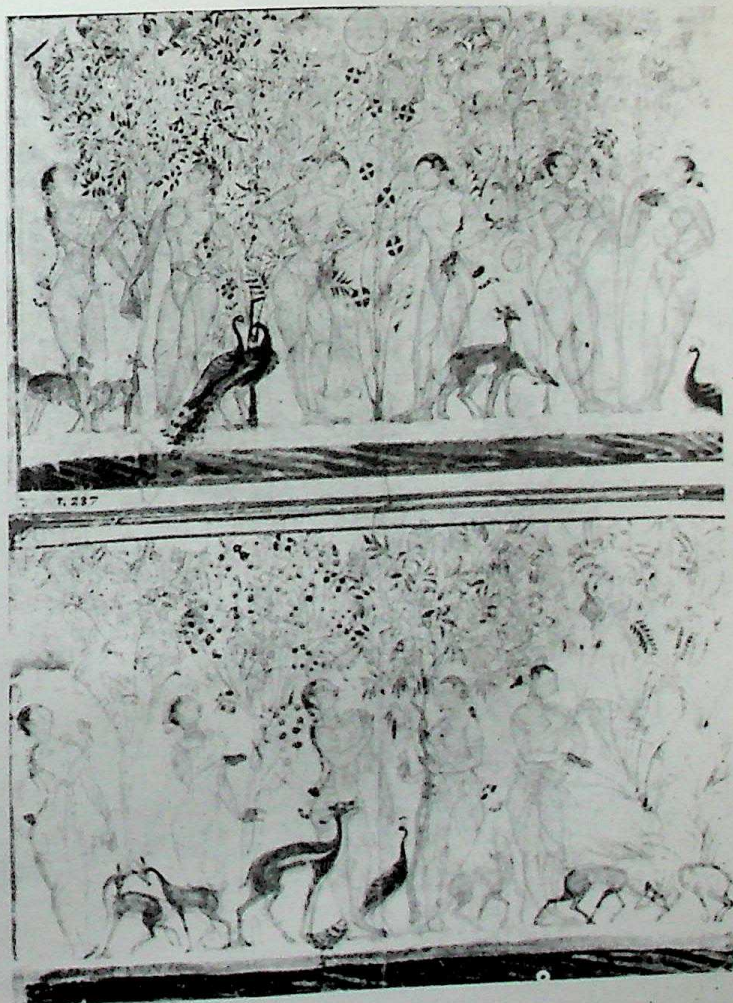
Paintings in Kaimur Hills



## Vaisnava Themes in Pre-Mughal Paintings



Copper plate engraving depicting Visnu on ratha and a devotee with folded hands.  
Dated 1196 A. D. Sundarban, West Bengal.

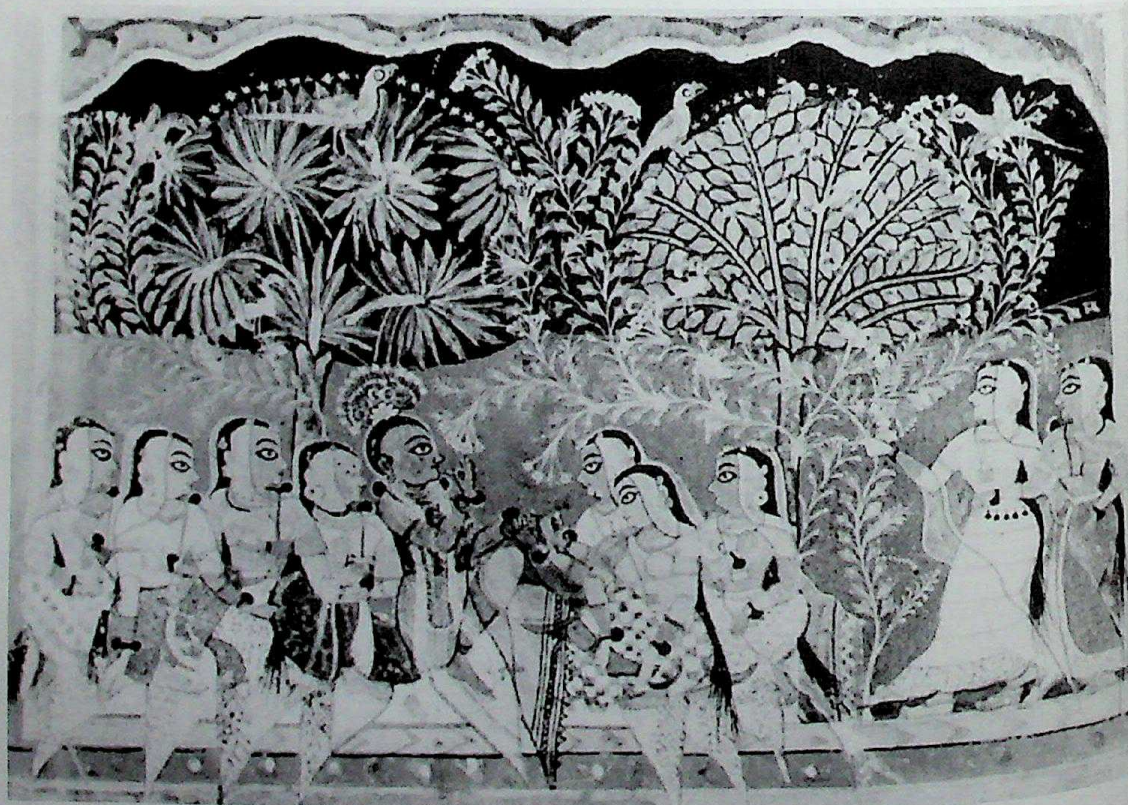


Gopis with peacocks and deers on the banks of  
the river Jumna, Orissa, c. 1550 A. D.





Bathing of Krishna by Yasoda and Gopis, Bhagavata Purana, Mewar, c. 1500 A. D.



Krishna with gopis in the forest Gitagovinda, Mewar, c. 1550 A. D.



## Biological Specimens and their importance to the visitor through Natural History Museum



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PFITZ

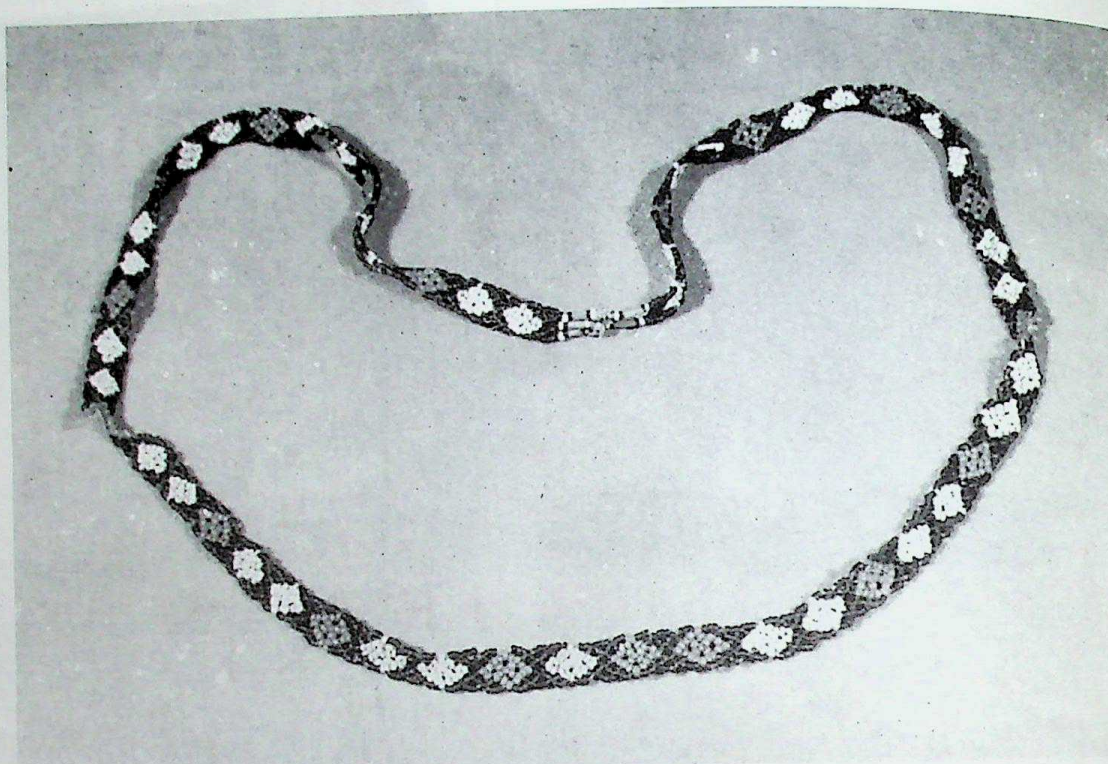
LILIUM MACKLINIAL, F. K. W.



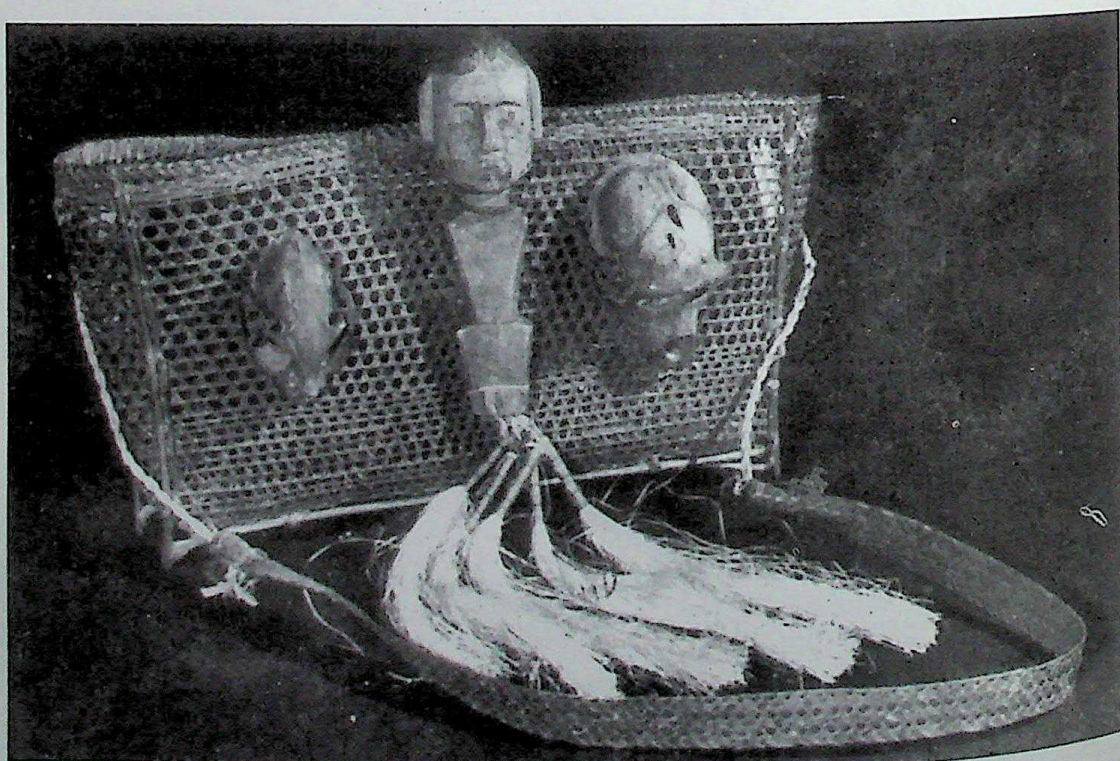
DENDROBIUM WARDANUM,  
Warner



## An Odyssey of the Art and Culture of the north east Indian Tribes

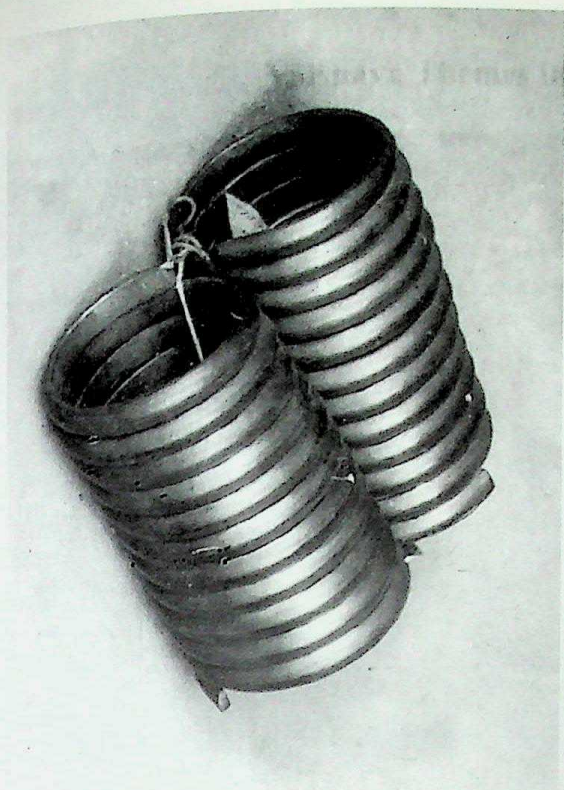


Multicoloured beaded necklace, Kanyak Naga, Nagaland



Head taker's basket decorated with monkey skulls and tassels, Kanyak Naga, Nagaland  
CC-0. In Public Domain. Gurukul Kangri Collection, Haridwar

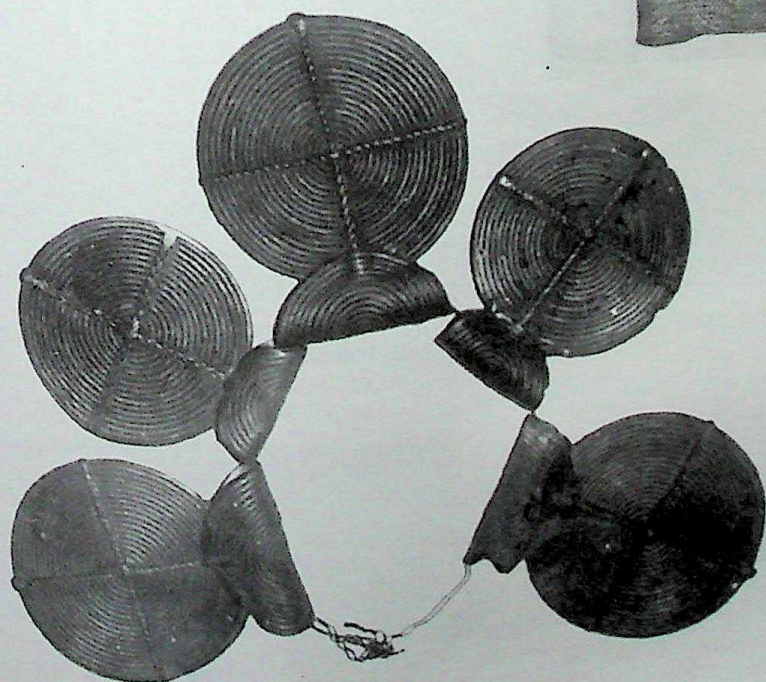




Spiral bracelets, Naga, Nagaland



'Cane-leg-guard', Angami Naga, Nagaland



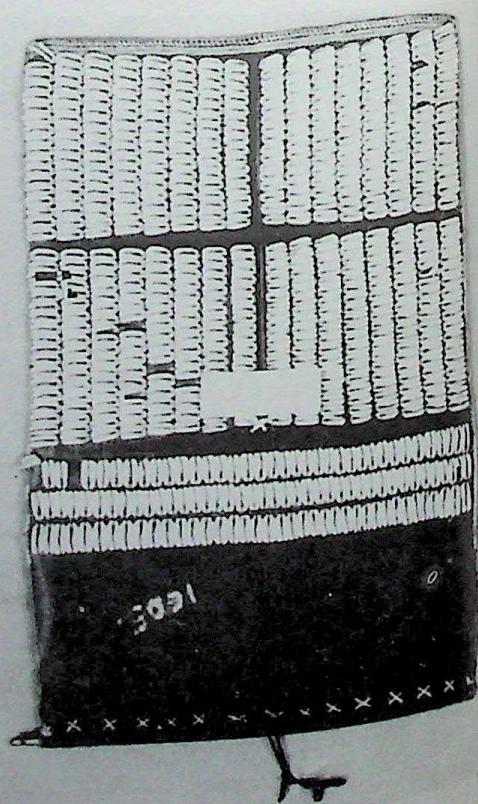
"BAYOP" Waist ornament of the unmarried Adi-girls, Arunachal Pradesh



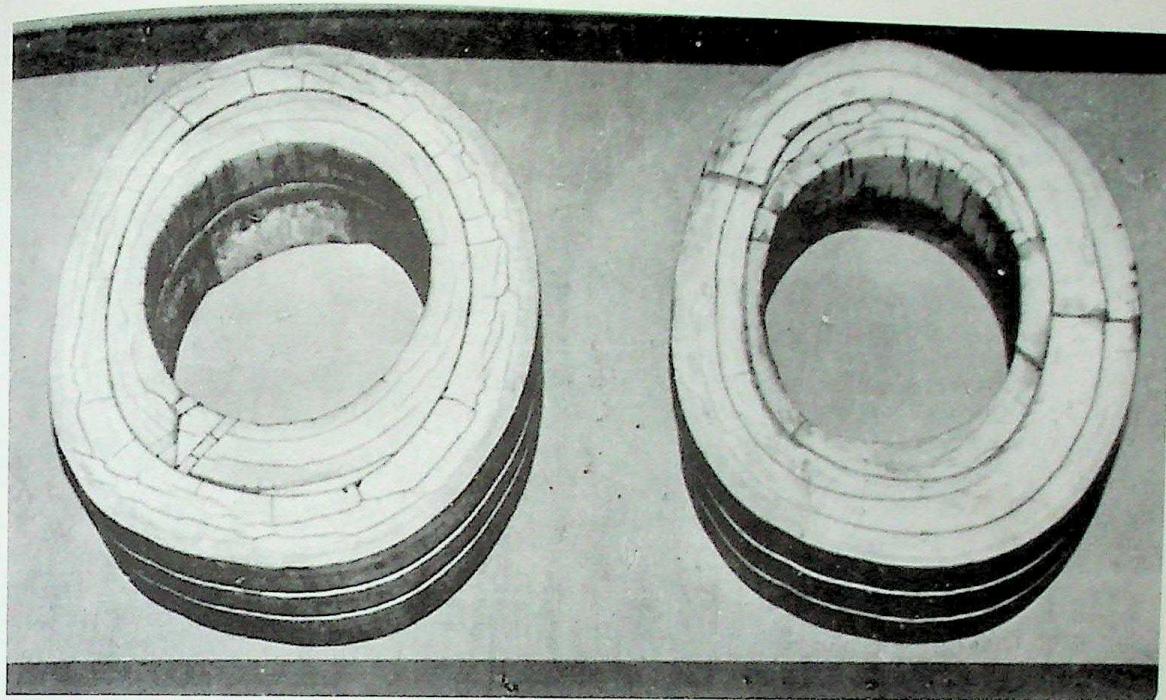


Ear-ornament, Angami Naga, Nagaland

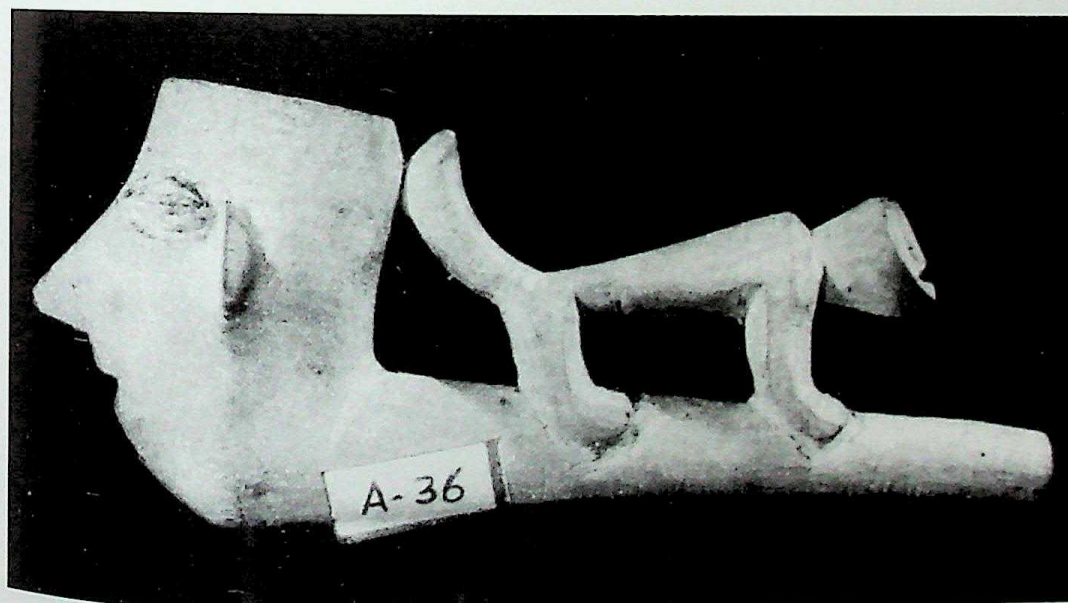
"KAP"  
Apron decorated with cowrie-shells, AO & Sema Naga, Nagaland





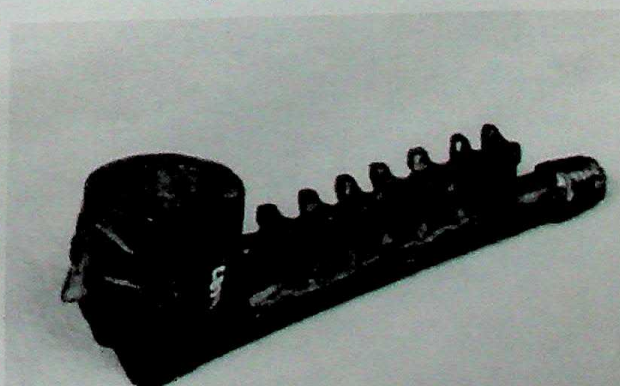


Ivory Armlet, Angami Naga, Nagaland



Wooden tobacco pipe with a figure of monkey, Phom Naga, Nagaland

Tobacco pipe, Angami Naga, Nagaland



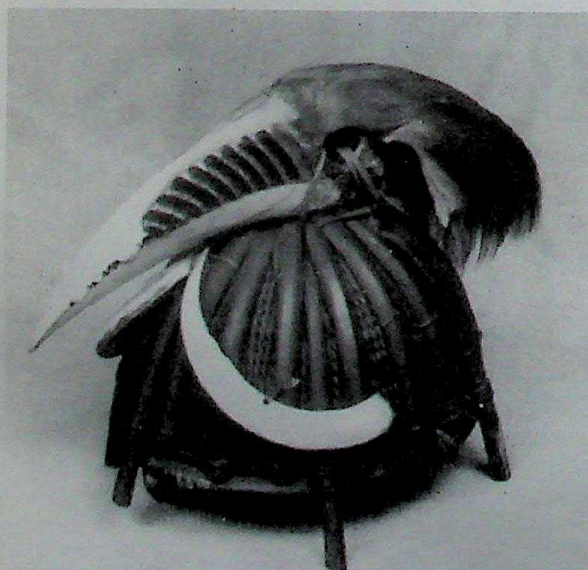




Haver Sack, Angami Naga, Nagaland



Bamboo basket, Angami Naga, Nagaland



DUMLUP-LUBRA  
Headgear with hornbill Beak, Adi, Arunachal Pradesh



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# INDIAN MUSEUM BULLETIN

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Terracotta medallion depicting a couple, Mahasthangarh, c. 8th Century A.D.







## Editorial Note

Like some of the previous issues of the Indian Museum Bulletin the present volume includes a number of papers presented at the seminar on *Art of baked clay* organised by the Indian Museum in collaboration with Brooklyn Museum, USA in the month of February, 1998.

The papers presented here reflect a moderately detailed survey of the Indian terracotta art of the three zonal centres, namely south, north and east. The technique of terracotta production, evolution of brick technology, ritual as well as temple terracottas have been studied by some scholars. Socio-cultural life, ornaments, music and dance as gleaned from terracotta temples as also making of clay dolls are also the subjects touched upon by the experts. A catalogue of Bengal terracotta in the collection of the Indian Museum is an added attraction of this volume.

We hope that this special issue on terracotta art of India will be appreciated like previous other volumes.

March, 2002  
Indian Museum, Kolkata

**Shyamalkanti Chakravarti**  
Director • Secretary







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## ASPECTS OF INDIAN TERRACOTTA

B. N. Mukherjee

If form and volume constitute the essence of sculpture, then the easiest plastic medium is pliable clay. In fact, it had been one of the earliest media of mobile art created by man. Items of this material may be baked by fire or left unbaked or hardened by the heat of the sun. To the first category belong the objects of art, decorated elements and items of utility made of terracotta or (products made by) earth baking or baked earth (Italian *terra + cotta* < Latin *terra + cocta* = earth-baking).

Clay figures in relief or in the round are known to have been found in isolated cases and in limited number in certain upper Paleolithic sites of Europe (c. 25000 - 20000 B.C.). Of these we can refer to the Willendorf Venus (Austria) and Kostienki Venus (Russian Federation). The prominent breasts and abdomen of these female figures indicate that the inspiration behind their creation was the importance attached to fertility and progeniture.<sup>1</sup> However, continuous art and other activities in terracotta commenced at different times of prehistory in several countries.<sup>2</sup> Its earliest known examples in the Indian subcontinent have been

unearthed at the neolithic site of Mehrgarh (III), at the head of the Kacchi plain in Baluchistan.<sup>3</sup> The early stage of this settlement has been dated to c. 5000 B.C. by radiocarbon determination,<sup>4</sup> though the undated lower levels are assumed to indicate a c. seventh millennium B.C. as the period of beginning of habitation in this locality. The available evidence suggests that the neolithic artist at Mehrgarh created art objects in terracotta in an age of farming economy.<sup>5</sup> Thus the age of the terracotta art in the Indian subcontinent began by the late sixth or early fifth millennium B.C.<sup>6</sup> In a sense it is continuing even today. However, the volume of activities might have varied from age to age and from area to area. The quantity and quality of specimens are remarkable at many of the sites of the Harappan culture and of the Maurya, Śungas, Śaka-Kushāna-Sātavāhana, Gupta and proto-mediaeval (c. A.D. 750-1200) ages and also of the late mediaeval period (*in inter alia* West Bengal and Bangladesh).<sup>7</sup>

The terracotta articles recovered from different localities of the above noted periods include human and animal figures,



seals, toys, ornaments, tiles, pottery, items of utility in daily life, decorative elements, ornaments, sculptured plaques, panels and bricks and architectural items and decors.<sup>8</sup> Kiln-burnt pottery, though made of clay and baked by fire, is generally left out of the purview of terracotta art. But a pot, whether wheel-turned or not, should be, as an item of terracotta, within the purview of our study.

The origin of terracotta art in India may have some connection with (i) a farming economy, highlighting the importance of the soil's fertility, (ii) man's desire for progeny and prosperity, and (iii) his eagerness to possess beneficial animals and to ward off the dangerous ones. All these should have led to cults and religious and magical practices around representative objects.<sup>9</sup> We may perhaps discern such representations in many of the early human and animal figurines in terracotta. The large number of female figurines with prominently displayed distinguishing organs may point to the popularity of the cults of the mother goddess and the deity of fertility. The early Jorwe phase at Inamgaon (in Maharashtra) has yielded the evidence of worship of the clay figure of a mother goddess (riding or sitting on a bull) in a shrine.<sup>10</sup>

Stylistically terracotta figures have been divided by S. Kramrisch into two types. One is designated as "ageless" and the other as the "timed variation".<sup>11</sup> The figures of the first type come from different ages and are "characterised by a modelling that reduces the form to a simple description"

of the "principal parts of the body, such as the head, the torso, the hands and the legs".<sup>12</sup> The figures of the time-bound type achieved stylistic excellence in the Śunga, Śaka-Kushāṇa and Gupta phases. The last two periods, particularly the third one, produced terracotta sculptures of fairly large size. We can especially refer here to the well-known terracotta icons of Gaṅgā and Yamunā from Ahichchhtrā and the figure of a donor (?) from Mirpur Khas.<sup>13</sup> In the Kushāṇa and Gupta phases the terracotta art represented a movement, "parallel to contemporary plastic art in stone", though bearing "the stamp and impress of the latter".<sup>14</sup> In certain areas and periods the features of terracotta sculpture may have conformed to a stylistic trend running simultaneously with the more well practised style. For an example, we can refer to numerous terracotta plaques and figures of the Pāla-Sena age unearthed at interalia Paharpur (Bogra district), Mainamati (Commilla district), Bhasu-Vihar (Bogra district) Jagjibanpur (Malda district) and Antichak (Bhagalpur district) which reveal a style separate from the well-known Pālā-Sena idiom.<sup>15</sup> So there might have been parallel trends in "time-bound" terracotta sculptures. The terracotta figures in numerous sculptured panels of the mid-eastern part of Indian subcontinent of the proto-mediaeval time (c.A.D. 750-1200), are marked by vivacity and often virility in appearance.<sup>16</sup> The same characteristics, though in a much lesser degree, are shared by the terracotta sculptures on the brick temples of the late mediaeval period in the territory now in West Bengal and



Bangladesh.<sup>17</sup>

The figures of the "ageless" types seem to have been done in antiquity by pressing soft clay with fingers and by applying to the main body thus formed the limbs separately fashioned. However, the terracotta objects may be prepared by various methods. These may be made by hands, or by hands around an armature or a core, or by casting from a single mould or a pair of moulds. The moulds carried the engravings of the figures in reverse. The use of double-moulds, which became popular in the Kushāṇa age, allowed the production of a figure in the round by joining together its front and back portions produced from two separate moulds. Terracotta objects may also be coil-built or wheel-thrown. A combination of two or more of these techniques may also be employed in creating terracotta sculptures.<sup>18</sup> The manufacturing technology consists of (i) "preparation of raw material (washing, mixing, tempering and plasticizing of the clay)", (ii) "forming process" (modelling, casting from moulds, pinching, coil-building, or wheel-throwing), (iii) firing (in different ways and at a temperature of about 600-800 f. ?) and (iv) "surface decoration" (by applying slips, glazing, painting or other application techniques).<sup>19</sup> The fourth stage may not be necessary for making all types of objects.

The moulds, made of clay in cases of small figurines or plaques, could have been carved out of wood if the requirement was of fairly large decorated plaques and bricks. The latter might have been especially true

in cases of producing terracotta plaques decorating Buddhist stūpas or shrines in proto-mediaeval eastern India or in manufacturing of decorated bricks or architectural decors of the temples of parts of mediaeval Bengal. Several late mediaeval temple inscriptions indeed refer to *sūtradhāras* or carpenters (who carved the wooden blocks for producing decorated bricks or architectural decors) as the builders of the shrines. (The term itself may, however, also indicate an architect). It appears from the terracotta plaques and bricks that the finishing touches to the clay figures were given by hands with the help of chisel or cutter or sharpner (made of bamboo lath).

Large figures could have been produced by using a number of moulds, (as witnessed in cases of some figures in late mediaeval temples of Bengal). There are indications that terracotta figures of really considerable size have been made in parts and in special applique technique (and generally not using any mould). This has been witnessed even in recent years in certain areas including parts of Tamilnadu: 'They are almost always made by hand and usually consist of basic lumps of clay to which dowels and pellets are added to form appendages. Their simple features are pinched or incised. Some start as pot shapes thrown on the wheel are adopted and added so that they become abstract depiction of animals or humans'.<sup>19a</sup>

The terracotta icons, plaques and panels, portraying deities, legends and



scenes of daily life, have already been recognised as sources of our knowledge of religious, iconographic, social and economic history.<sup>20</sup> Many of the panels bring into relief actions of ordinary people as well as elite of the contemporary society.<sup>21</sup> This is especially true in cases of the scenes on brick temples of the late mediaeval and early modern Bengal.

How far the objects in terracotta can be regarded as specimens of an art of the people? No doubt, the medium of the art in question, i.e. plastic clay, can be within the reach of an artist even without any significant patroange, at least in areas where such material is available. His clientele also need not be rich. But the production of excellent terracotta objects (including the large ones) of the "time-bound" type over a wide area for a considerable period presupposes employment of skilled artists patronised by the richer (and not only the poorer) sections of the society. Similarly, though the specimens of the "ageless" type betray an eternal "folk" element, numerous sculptures of the "time-bound" variety reveal high degree of excellence and sophistication in technique and style. Bāna mentioned in the 7th century about the preparation of terracotta objects, apparently for presentation, on the eve of the marriage of princes Rājyaśrī.<sup>22</sup> Several Indian texts deal in detail with clay (including terracotta) toys,<sup>23</sup> while a few early and mediaeval treatises furnish information on preparation of clay figures.<sup>24</sup> Thus at least in certain periods all sections of the society

of an area may have been interested in terracotta art.

Pioneering works for understanding and appreciating the art of terracotta have been done by A.K. Coomaraswamy, St. Kramrisch, V.S. Agrawala, S.K. Saraswati, S.C. Kala and others. Nevertheless, the scope for further research and discussion is far from exhausted. The need of the hour is survey and documentation of the objects discovered in each area<sup>24a</sup> and to note the stratigraphic evidence about the dates of the items found in excavations.<sup>25</sup> Help of technologists should be requisitioned for ascertaining the manufacturing techniques and dates of early specimens.<sup>26</sup>

Meanwhile we may discuss certain problems and offer a few more suggestions for the furtherance of the study. It is often believed that there is little evidence of terracotta production between the decline of the Indus Valley Civilization (c. 1750 B.C.) and c. 6th century B. C.<sup>27</sup> This belief is not true about the production of terracotta items in general, of which we have ample evidence.<sup>28</sup> There was also not a total absence of manufacture of human or cult figures in terracotta. Images of "mother goddess" have been unearthed at Nagda (Ujjain district, M.P.) at the levels datable to c. 1500 to 800 B.C. and 750-500 B.C.<sup>29</sup> A period of the Jorwe culture at Daimabad (Ahmedabad district, Gujarat), dated to c. 1100 B.C., has yielded cult images in terracotta, while human figurines in applique on pottery have been recovered from Phase III (Diamabad culture - c. 1800 - 1600 B.C.) and Phase IV (Malwa culture



c. 1600-1400 B.C.) at the same site.<sup>30</sup> Female figures have come to light also at the level of Period III (c. 2000-1500 B.C.) at Watgal (Raichur district, Karnataka)<sup>31</sup> and from the sites of the Gandhāra grave culture (especially of the Timargarha area - c. 1710-1020 B.C.).<sup>32</sup> A figure of a mother goddess occurred in the earliest deposit of the Jorwe culture at Nevasa.<sup>33</sup> We have already referred to the shrine of a mother goddess worshipped by the people of the same culture at Inamgaon (Maharashtra).<sup>34</sup> On the other hand, female figurines from pre-600 B.C. levels have been reported from Ujjain (M.P.).<sup>35</sup>

These data are sufficient to prove the continuity of the terracotta production - including female figures - during the period of from c. 1750 to 600 B.C. If the available number of male or female figures are much less during the period in question in comparison to that of the age of the Harappan civilization, the reason may be inadequate explorations and excavations. Another plausible hypothesis may be gradual encroachment in the areas of local or regional cultures by animistic beliefs or by the Brahmanical culture, which had been initially aniconic (or largely so).

Another theory about the decline in the production of terracottas, this time for urban markets after A.D. 600, is based on a wrong notion.<sup>36</sup> The belief about the decline of towns (and lack of trading activities and of coins) in the post-600 A.D. period is not supported by available facts.<sup>37</sup> Terracotta figures as well as items of utility in terracotta have been found at urban sites,

in spite of the extremely inadequate number of the excavated towns of the proto-mediaeval age (c.A.D 750-1200). To prove our point we can refer to the terracotta plaques from the city of Devaparvata (Mainamati) belonging to this period.<sup>38</sup> This evidence reveals the danger of building up a hypothesis on inadequate data in support of baseless presumptions.

An interesting development of the proto-mediaeval period is the increasing use of stone for making cult icons of permanent nature (since a item of stone is more durable than that of terracotta). On the other hand, for periodic or annual worship the use of images of clay (to be immersed in water after the ceremony) was encouraged. An interesting section of the *Mārkaṇḍeya Purāṇa* refers to the making of an earthen image for worship.<sup>39</sup> The mediaeval text like *Kāṁikāgama* alludes to the *lingas* of clay and also of baked clay (the latter for ensuring destruction of enemies after worshipping it).<sup>40</sup> Another mediaeval text, *Aṭṭisamhitā*, disfavours the making of divine images in terracotta.<sup>41</sup> This interesting taboo needs further investigation.

The great functional value of items of terracotta is emphasised by tiles, bricks, pottery and several types of utensils. Of these bricks and tiles can be used for indicating the dates of monuments or sites built up by using them. The form and style of a class of pottery can indicate its age and also the approximate time of the site of its discovery. Hence the technology and varying shapes and sizes of bricks of



different ages should be properly investigated. From the art critics's point of view, it may at the same time be remembered that all these items of great utility can, if so desired, be decorated (at least in several cases) and can be turned into instances of art in industry. We can refer to architectural terracotta of the Hellenistic age, decorated brick temples of mediaeval Bengal, or decorated facades of buildings of later centuries.<sup>42</sup>

Since clay is the base of terracotta, items of clay should also come under the purview of our study. Unbaked and painted dolls have been used through the centuries. Large clay figures (with a core of straw and bamboo) are made even during the present age. One of the most important uses of clay is for making models. In post-renaissance Europe "clay studies. were considered an important part of a sculptor's" academic training and were often passed on by masters to their workshops or to a favoured pupil. "Danese Cattaneo, for example, left all his Bozzetti to Girolamo Campagna".<sup>43</sup> Such models were also used as presentation models and as guides to aspiring artists.<sup>44</sup> We should search for similar use of clay models in mediaeval India.

If glazed terracottas are within the circle of our study, porcelain should be within or near its periphery. After all an item of porcelain is a fine vitrified translucent earthenware, first made in China.<sup>45</sup> We should investigate into the possibility of making imitations in mediaeval India, where the Chinese items

were imported. The discovery of fragments of coarse porcelain in addition to fine Chinese products from the area of mediaeval Gaur (Maldah district, West Bengal),<sup>46</sup> tempts us to visualise Indian attempts at this direction. Fragments of bowls of porcelain bearing legends in Proto-Bengali characters, found in this locality and elsewhere,<sup>47</sup> might have been imports made on order or local creations or at least sources of inspiration for local enterprisers.

However, inspite of these diversions, regional, inter-regional and intra-regional developments in techniques and styles in creating terracottas will be the main theme of study. Terracotta figures, free-standing or on seals or plaques of the late centuries B.C. and early centuries A.D. may be of great help in understanding the early stages of iconic developments. Incisive studies will enable us to ascertain the degree of terracotta art's dependence on artistic movements in other media. The evidence of transmigration of forms and motifs from one region (or country) to another may be found on scrutiny. Foreign influences on early Indian terracotta art and Indian influence on early terracotta objects of neighbouring countries may also invite our attention. In this connection we can refer to the terracotta figures concerning Indian religious themes discovered in certain localities of western Central Asia in recent times.<sup>48</sup> As we have already advocated, it is also high time for scholars to consider the feasibility of including pottery of excellent artistic quality within the purview of the terracotta art.<sup>49</sup>



Research in an old but continuing art is a challenging job. Here we find continuity and change in the form and technique even in the data of investigation. But for maintaining this character of the subject we have also the responsibility of urging upon the authorities concerned to help the art to flourish at least in areas (like West Bengal and Tamilnadu) where it has survived. Properly promoted, the artists can have a large clientele in and even outside India. If artists of Bengal could

have supplied life-size statues in terracotta to an American of Salem, Massachusetts (U.S.A.), in the early 19th century,<sup>50</sup> why cannot they repeat the feat to-day? Fortunately, terracotta art, aided by modern technique, is producing in urban areas quality products for rich and/or inquisitive clientele. The art of terracotta can indeed be at once a subject of research, a fountain of beauty, and a source of income. Let us all strive for realising this potentiality.



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8. H. Osborne, *op.cit.*, p. 1126; A.G. Poster, *From Indian Earth—4000 Years of Terracotta Art*, New York, 1986, pp. 21-22.
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39. *Mārkaṇḍeya-Purāna*, XCIII, 7-8. A large image of clay may have a core of wood and straw.
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43. *Ibid.*, pp. 495-96.
44. *Ibid.*
45. J. and A.H. Burling, *Chinese Art*, New York, pp. 133 f.
46. This information has kindly been supplied by Sri Pratip Mitra of the State Archaeological Museum, West Bengal.
47. B.N. Mukherjee, "Inscribed Porcelain Sherds from Gaur and Saptagram". *Pratnasamikshā*, no. 2-3; p. 271. If the sherds were parts of ritual bowls made in China on order from Bengal in the mediaeval age (in about the 15th century) (*ibid.*, p. 271), the manufacturers must have copied the forms of letters from a chart of a much earlier age (10th-12th century A.D.) when Proto-Bengali characters had been in use.
48. *Information Bulletin, International Association for the Study of the Cultures of Central Asia*, no. 11, Moscow, 1986, pp. 20f. The scenes on several plaques found at Pagan betray a popular style known in the Palā-Senā domain and age (G. H. Luce, *Old Burma-Early Pagan*, New York, 1970, vol. III, pls. 31, 50 etc.; B.N. Mukherjee, *East Indian Art Styles - A Study Parallel Trends*, pp. 5f; figs. 2f).
49. It is interesting to note that J.H. Marshall described terracotta figurines as "pottery figurines" (*Mahenjo-Daro and the Indus Civilization*, vol. I, reprint, Delhi and Varanasi, 1973, p. 330).
50. These statues are now in the Peabody Museum in Salem (A.G. Poster, *op.cit.*, p. 59 and fig. 14).



# EVOLUTION OF BRICK TECHNOLOGY IN INDIA

Asok Datta

In response to an eternal urge for security, peace and love, man began to settle permanently during the early part of the Holocene period. The incident broadly coincided the beginning of domestication of plants and animals. The switch over from the Mesolithic hunting/gathering subsistence technology to Neolithic agro-pastoral economy, had, in fact, profound effect on human society. The evidence of this transformation is documented first in the middle east including Afghan/Baluch border land then to other parts of the world (Singh, 1974).

For construction purposes, man initially selected stone and wood as raw materials. But gradually realized the utility of clay. The plasticity of clay has great advantage over stone and wood. Clay can be moulded into any shape. Moreover, when fired, it can assume the strength of almost stone. For example, one square centimetre of a well burnt brick can carry the load of 250 kg. So, man finally selected clay as raw materials for the construction

of buildings. Again this knowledge first came in middle east and then other parts of the world.

## Pre-Harappan Phase :

So far as the Indian sub-continent is concerned, the earliest evidence of mud brick, being used in construction, came from Mehrgarh, Period-I (Jarrige, 1993), a site in Baluchistan. It provides the earliest evidence of multi-roomed mud-brick buildings with provision of open space between them. The open space was either used for domestic purpose or burial ground (Possehl, 1993, P.15-28). Radio-carbon dates firmly place Mehrgarh period I to 7000 B.C. The early farming communities of Mehrgarh lived in multi-roomed houses being constructed by mud-bricks. The length, breadth and thickness ratio is not available. But what is important is that by about 7000 B.C., the early inhabitants of Baluchistan realised the utility of clay and acquired the knowledge of brick-making technology. Brick technology was initially confined to the people of Mehrgarh, but



35. N.R. Banerjee, *op.cit.*, p. 223.
36. A.G. Poster, *op.cit.*, p. 41.
37. B.N. Mukherjee, *Media of Exchange in Early Mediaeval North India*, New Delhi, 1982, pp. 67 f.
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39. *Mārkaṇḍeya-Purāṇa*, XCIII, 7-8. A large image of clay may have a core of wood and straw.
40. T.A. Gopinath Rao, *Elements of Hindu Iconography*, vol. II, pt. I, reprint, Varanasi, 1971, p. 76.
41. *Aṭṭisāṇhitā* (edited by R. Bhattacharyya and M.R. Kavi), Tirupati, 1943, p. 82, v. 68, p. 378, v. 55. See also K.M. Verma, *The Indian Technique of Clay Modelling*. Santiniketan, 1970, pp. 5 and 19f.
42. J. Turner, (editor), *The Dictionary of Art*, vol. 30, New York, 1996, pp. 493-494 and 503-507; Z. Haque, *op.cit.*, pls. II f.
43. *Ibid.*, pp. 495-96.
44. *Ibid.*
45. J. and A.H. Burling, *Chinese Art*, New York, pp. 133 f.
46. This information has kindly been supplied by Sri Pratip Mitra of the State Archaeological Museum, West Bengal.
47. B.N. Mukherjee, "Inscribed Porcelain Sherds from Gaur and Saptagram". *Pratnasamikshā*, no. 2-3; p. 271. If the sherds were parts of ritual bowls made in China on order from Bengal in the mediaeval age (in about the 15th century) (*ibid.*, p. 271), the manufacturers must have copied the forms of letters from a chart of a much earlier age (10th-12th century A.D.) when Proto-Bengali characters had been in use.
48. *Information Bulletin, International Association for the Study of the Cultures of Central Asia*, no. 11, Moscow, 1986, pp. 20f. The scenes on several plaques found at Pagan betray a popular style known in the Palā-Senā domain and age (G. H. Luce, *Old Burma-Early Pagan*, New York, 1970, vol. III, pls. 31, 50 etc.; B.N. Mukherjee, *East Indian Art Styles - A Study Parallel Trends*, pp. 5f; figs. 2f).
49. It is interesting to note that J.H. Marshall described terracotta figurines as "pottery figurines" (*Mahenjo-Daro and the Indus Civilization*, vol. I, reprint, Delhi and Varanasi, 1973, p. 330).
50. These statues are now in the Peabody Museum in Salem (A.G. Poster, *op.cit.*, p. 59 and fig. 14).



# EVOLUTION OF BRICK TECHNOLOGY IN INDIA

Asok Datta

In response to an eternal urge for security, peace and love, man began to settle permanently during the early part of the Holocene period. The incident broadly coincided the beginning of domestication of plants and animals. The switch over from the Mesolithic hunting/gathering subsistence technology to Neolithic agro-pastoral economy, had, in fact, profound effect on human society. The evidence of this transformation is documented first in the middle east including Afghan/Baluch border land then to other parts of the world (Singh, 1974).

For construction purposes, man initially selected stone and wood as raw materials. But gradually realized the utility of clay. The plasticity of clay has great advantage over stone and wood. Clay can be moulded into any shape. Moreover, when fired, it can assume the strength of almost stone. For example, one square centimetre of a well burnt brick can carry the load of 250 kg. So, man finally selected clay as raw materials for the construction

of buildings. Again this knowledge first came in middle east and then other parts of the world.

## Pre-Harappan Phase :

So far as the Indian sub-continent is concerned, the earliest evidence of mud brick, being used in construction, came from Mehrgarh, Period-I (Jarrige, 1993), a site in Baluchistan. It provides the earliest evidence of multi-roomed mud-brick buildings with provision of open space between them. The open space was either used for domestic purpose or burial ground (Possehl, 1993, P.15-28). Radio-carbon dates firmly place Mehrgarh period I to 7000 B.C. The early farming communities of Mehrgarh lived in multi-roomed houses being constructed by mud-bricks. The length, breadth and thickness ratio is not available. But what is important is that by about 7000 B.C., the early inhabitants of Baluchistan realised the utility of clay and acquired the knowledge of brick-making technology. Brick technology was initially confined to the people of Mehrgarh, but



gradually it spread over to other regions. By about 4000 B.C., the evidences of mud-Bricks came from a number of sites including Kili-gul-Mahammad, (Pd I), Damb-Sadat, (Pd I), Rana Ghundai (Pd I), Sur-Jangal (Pd.I), Mundigak (Pd.I - IV) etc. in Afghan/Baluch border land. During the same period of time, Amri (Pd. 1A - 1D) provided the evidence of mud-Bricks. The tradition was then carried out to sites like Kalibongan (Pd.I), Kot-Diji (Pd.I), (Khan, 1959), Jalilpur (Pd.I) etc. of the Indus system around 3000 - 2800 B.C. (Fig. No.1).

There is hardly any doubt that the above sites have definitely contributed to the development of Burnt Bricks during Indus Valley civilization. D.P. Chattopadhyay made an extensive survey on Harappan Brick technology in his book on 'History of Science and Technology in Ancient India'. The length, breadth and thickness ratio of 3:2:1 for Pre-Harappan Brick technology as suggested by many scholars, is practically based on data from two closely located sites namely Kalibongan and Banawali. But information from other sites particularly those from Baluchistan are sadly lacking. So, unless we get evidences from other sites and confirm to the ratio of 3:2:1, it is difficult to accept the conclusion drawn by Chattopadhyay (Chattopadhyay, . 1986, P.109) who suggested that "In Kalibongan, the transition from Pre-Harappan stage indicates also some change in technique in Brick-making, the most conspicuous of which was the change in the proportion of Bricks from 3:2:1 to 4:2:1". The Indus valley

people throughout their existence either in the pre-mature or fully mature stage extensively used both mud-Bricks and burnt Bricks, but even then the proportion of 4:2:1 was maintained. How the tradition was lost? The area needs investigation.

### Harappa

One of the most significant and spectacular achievements of the Harappan culture is the great uniformity and standardization of both Burnt and sun dried Bricks which were extensively used for the town planning. The remarkable town planning speaks out the technological innovative power of the Harappan people. In laying out the great bath at Mahenjodaro, the granaries of both Mahenjodaro and Harappa, the mud platforms, mud-Brick houses, fortifications, drains etc., the Harappans have shown the skill that one can expect from a highly organised urban cities. At Mahenjodaro, sun dried Bricks were used for fillings but at Harappa, it altered with burnt Bricks course by course while at Banawali, Lothal and Kalibongan, burnt Bricks were used exclusively for wells, drains and bath-rooms only (Bridget and Raymond, 1983, PP. 176-180).

The quality of Harappan burnt Bricks was excellent as Mackay who excavated Mahenjodaro (Mackay, 1938) rightly observed that "... Well burnt Bricks, and those of Mahenjodaro are of excellent quality, are practically indestructible and can be used over and over again, provided that a moderate amount of care is taken in removing them from the walls" -



K. N. Dikshit (1967) on the other hand observed that "The Bricks used for building of houses in Mahenjodaro and Harappa are well burnt and of excellent proportions which have excited the admiration of modern engineers in Sind."

Regarding the Bricks of Harappan phase at Banawali, the excavator (Bist, 1982) observed that " - Bricks both burnt and sun dried were carefully moulded into various sizes which except the wedge shaped examples, form two broad groups and always given the ratio of 4:2:1". It appears therefore, that the quality and volume of both burnt Bricks and sun dried Bricks used in different purposes in the Harappan culture speak out the most advanced scientific technology of proportion that was build up by the Harappans over the centuries.

The most important part of Brick technology is the maintenance of proportions between length, breadth and thickness. The Harappan took great care to maintain the proportion between length and breadth. The next important part is clay which should be salt free. For this purpose, the Harappans at Mahenjodaro collected clay from few feet below the surface level in the vicinity area of Mahenjodaro to avoid salt impregnated clay (Marshall, 1931). No binding materials were used by the Harappans. Great care is taken to make the clay free from external particles and then mixing the clay with water. The mixing is made either by machine or animals or even by manual labour. At present white sand is used as binding materials. Finally, the shape is given by the mould. Preliminary

drying is made in brick field. The Harappans used wood as fuel while the present practice is coal. The colour of the Harappan brick ranges from straw to bright red. The type and the structure of Harappan kiln is not known (Chattopadhyay, 1986). The present brick ratio is 3:2:1. The Harappans used brick dust and lime as mortar.

### Post-Harappa

The disintegration of the Harappan culture around 1750 B.C. and the beginning of Historical period around 600 B.C., this intervening period covering over thousand years witnessed the decline of urban growth and emergence of rural village settlements mainly based on agriculture. In fact, during this long span of time, the focus of human settlement has been gradually, but persistently shifting from the Indus system to Ganga system. The archaeological evidences unearthed from excavations over the last few decades strongly suggest this pattern of settlement movement.

According to Chattopadhyay (1986) the brick technology ceased to exist in the intervening period. He further suggested that "Brick technology is conspicuously absent during the dark age" or "dark period" intervening the two urbanizations notwithstanding an insignificant number of stray evidences like those of Bhagawanpura and Dadheri". - But to my mind neither the Brick technology in the intervening period ceased to exist, nor does it proper to designate it as "Dark Age" or "Dark Period". In fact, the time and space



dimension are very important criteria for understanding any culture growth. The Harappans had a very highly organised urban institution where burnt Bricks for building construction was a necessity to accommodate large population, and on the other hand, the Indus system provided the much needed base for such development. But in case of a village based culture largely depending on agriculture, the necessity of bricks (either sun-dried mud or burnt) was not so much till these villages are integrated to form a strong institution. This intervening period between two urbanizations may be termed as formative stage of the Historical period. Many new developments took place during this time. Moreover the tradition of brick technology did not cease to exist as evidenced by the discovery of new materials over this region.

The overlapping phases of P.G.W. and late Harappa have yielded evidences of mud Bricks. The important sites are Bhagwanpura, Dadheri and Sanghol in Haryana while the pure P.G. levels at Jakhera, Vaisali (Sinha, 1969) Hastinapur, Ahichatra and Allahapur in U.P. have also yielded mud Brick evidences. But the great uniformity of length, breadth and thickness proportions of Bricks have been displayed by the people of Nagda during period I and Period II (1500 B.C. - 500 B.C.) The ratio was 5:3:1 which confirm to the Harappan tradition. Besides, the evidences of burnt Bricks from Kausambi (Sharma, 1969), and Gilund also suggest that the technology of burning Bricks did not extinct. Its application was restricted depending on the

nature of demand.

So, we can conclude that the Brick technology initially developed at Mehargarh around 7000 B.C. continued and evolved through time and space. Only the proportions of length, breadth and thickness underwent considerable amount of changes overtime. With this background in mind, I will focus on data collected from different sites and different culture periods in India to find out the amount of changes that have taken place since its inception. The present analysis is based on 275 Brick samples belonging to different culture periods.

#### Analysis :

55 Brick samples from Mahenjodaro represent the Harappan culture. The analysis of length, breadth and thickness shows six types of different proportional Bricks, of which the common and popular Brick ratios are 4:2:1, 5:2:1 and 5:3:1 (Fig. Nos. 2-6).

The next Maurya/Sunga (Waddell, 1903) periods are represented by an equal number of 55 samples. The sample represents 14 sites. The analysis shows 10 different types of Bricks were in use during these periods, of which six types can be identified as common. The common ratios are 6:4:1, 7:4:1, 7:5:1, 6:3:1 and 5:3:1 (Fig. Nos. 7-8)

59 samples of Kushana period represent 11 sites. The analysis shows that except the samples from Satanikota (Ghosh, 1986) in Andhra, the people followed the earlier



Maurya/Sunga brick technology of proportions. The common ratios are 6:4:1, 7:5:1, 7:4:1, 5:3:1 and 8:5:1. The analysis shows the existence of 14 different types of Bricks (Fig. Nos. 9-10)

Gupta material comprises 51 samples representing only 6 sites. Although 16 different brick types have been identified during this period, but the popular and common types confine to 5 only. The tradition of earlier technology of proportion was maintained by the Gupta people. But the most significant feature of this period is that it shows the beginning of reduction of Brick sizes despite the fact that the earlier tradition of proportion was maintained. The popular and common ratios are 8:5:1, 6:4:1, 7:4:1, 7:5:1, 5:3:1 (Fig. Nos. 11-12)

A significant departure from the earlier Brick technology is noticed during Pala period. The proportion of length, breadth and thickness of Bricks have been drastically changed. 36 samples representing 5 sites have been taken into consideration in the present analysis. The analysis shows 12 different Brick types, of which 3 can be identified as basic types. The ratios are 4:3:1, 6:4:1 and 5:4:1 (Fig. Nos. 13-14)

The analysis of 19 samples from a single site of Gour in Malda shows that the most common and popular Brick type is represented by 4:3:1 ratio.

## Conclusion

On the basis of above analysis, we can conclude that the inception of brick technology was first made at Mehergarh around 7000 B.C. and gradually defused to other parts of the Indian sub-continent with time. During the long span of its history, it developed, evolved and transformed into better forms. We can identify four basic standard types having consistency through time and space on the basis of our present analysis. The types represent the following ratios :

4:2:1, 7:4:1, 6:4:1 and 4:3:1 (Fig. No. 15)

The most important observation made in this paper is the continuity of the Harappan Brick technology of proportion. The analysis shows that the Harappan brick ratio of 5:3:1 continued with variable frequency up to pala period. Finally, it may be concluded that in the whole history of Brick technology in India, there were three important Nucleus regions namely Indus valley, Upper/middle Ganga valley and Middle/lower Ganga valley, each region has contributed equally to the development of modern Brick technology. In the total process upper/middle Ganga valley has played the most crucial role for having overlapping traditions of Brick technology (Fig. No. 16).



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Annual Report	1936-37	:	"



## MAP SHOWING DISTRIBUTION OF PRE-HARAPPAN SITES

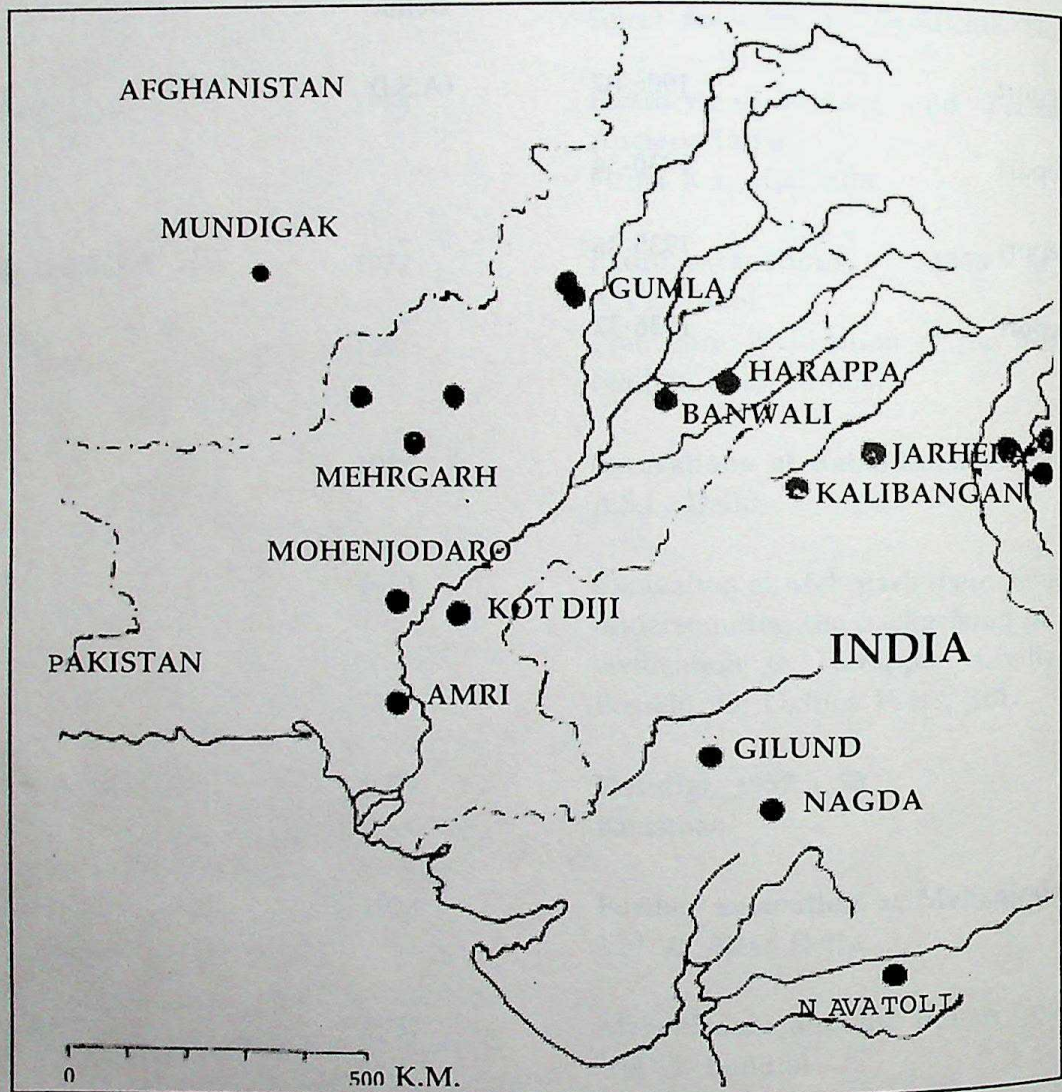
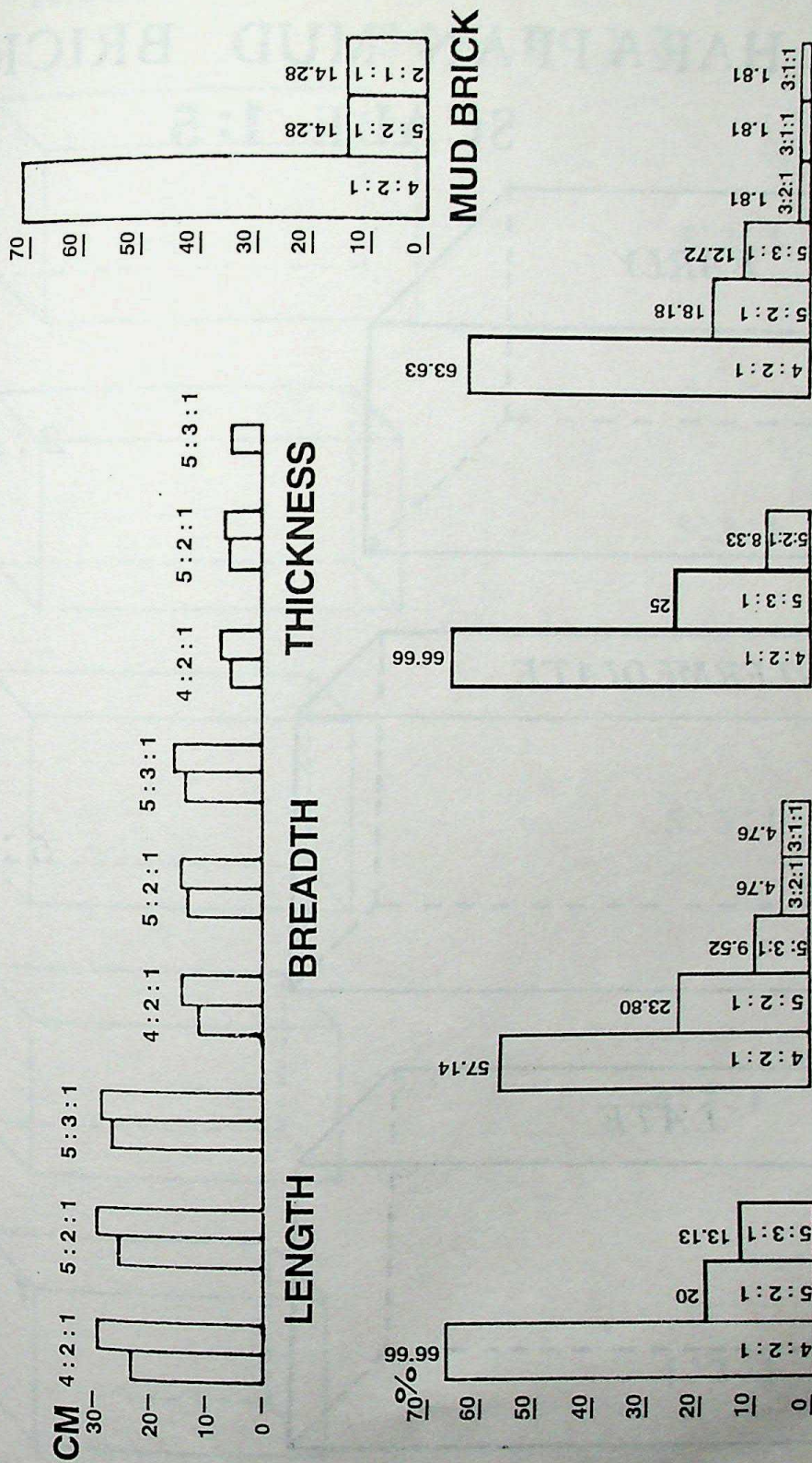


Fig. No. 1



# HARAPPA



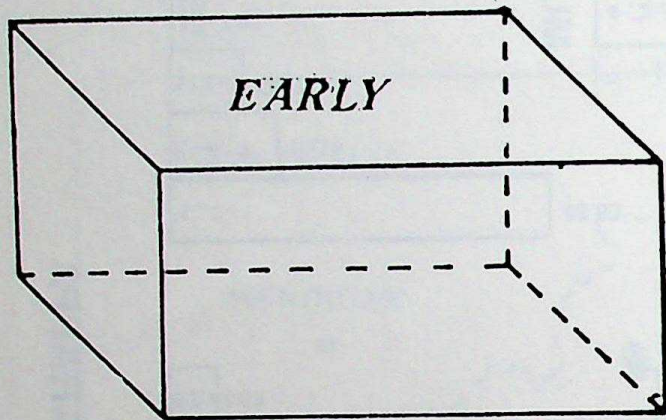
## EARLY HARAPPA; MATURE HARAPPA; LATE HARAPPA

Figure No. 2

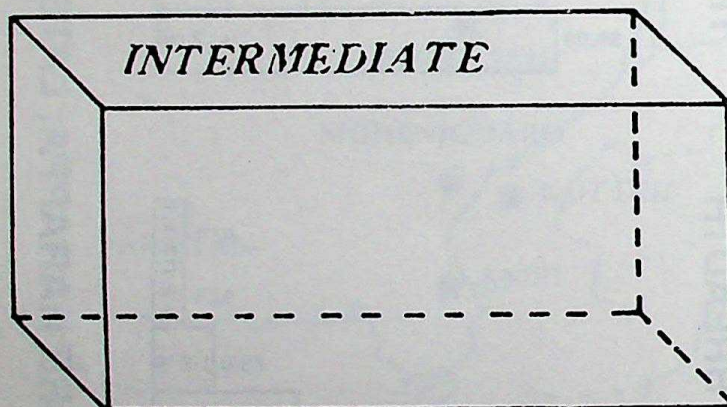


# HARAPPAN MUD BRICKS

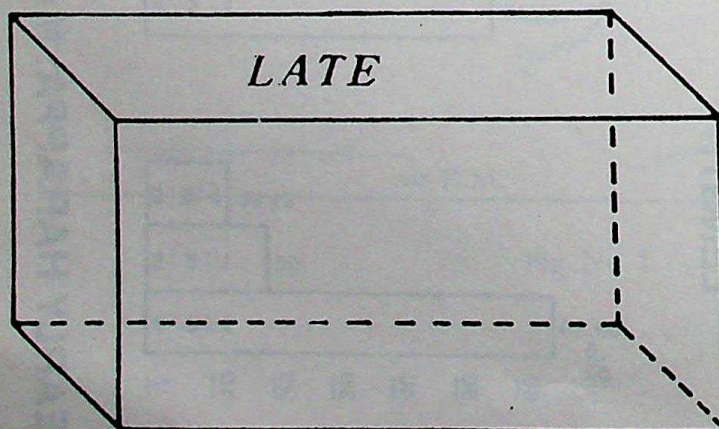
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*5 : 2 : 1*



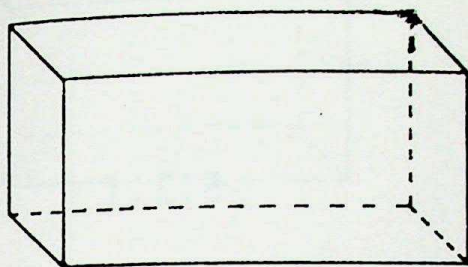
*4 : 2 : 1*

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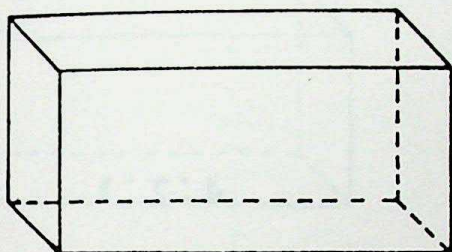


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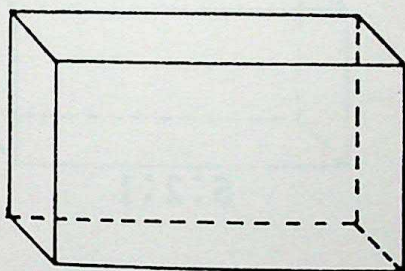
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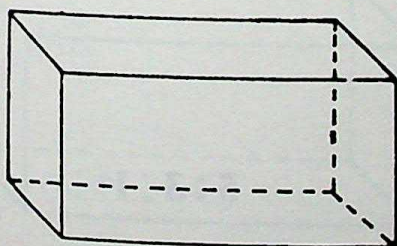
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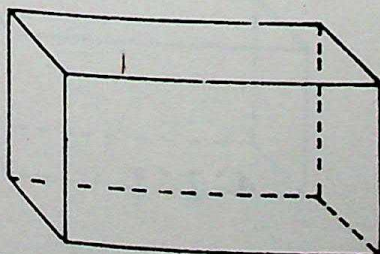
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5:3:1



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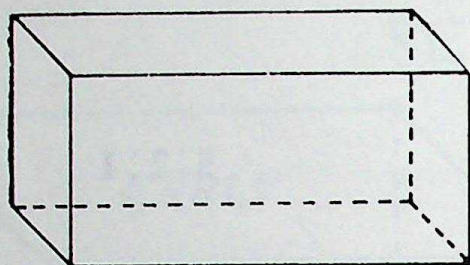


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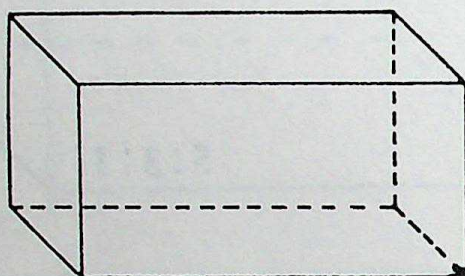
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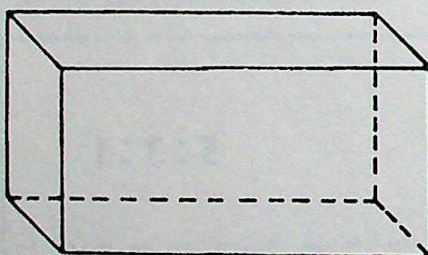
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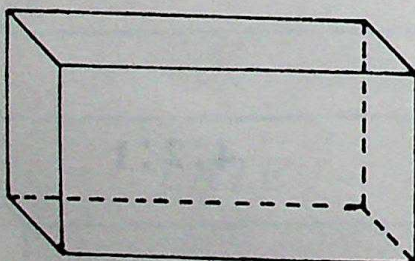
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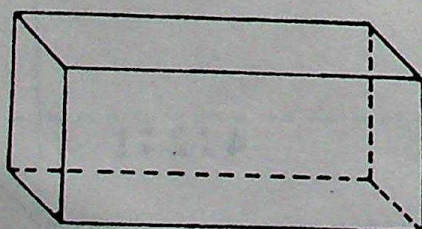
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5:3:1



4:2:1

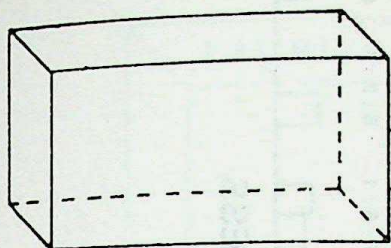
Figure No. 5



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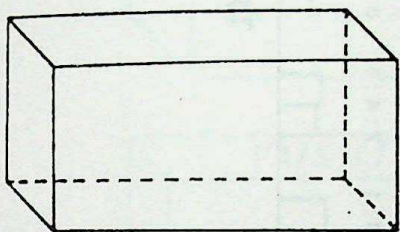
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HARIDWAR



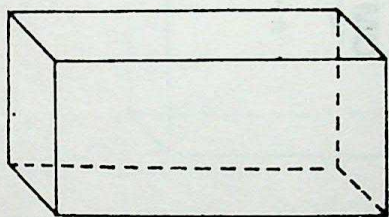
TYPE A

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TYPE B

5:2:1



TYPE C

4:2:1

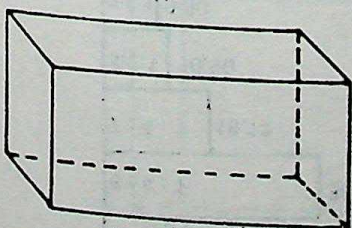


Figure No. 6



# MAURYA - SUNGA PERIOD

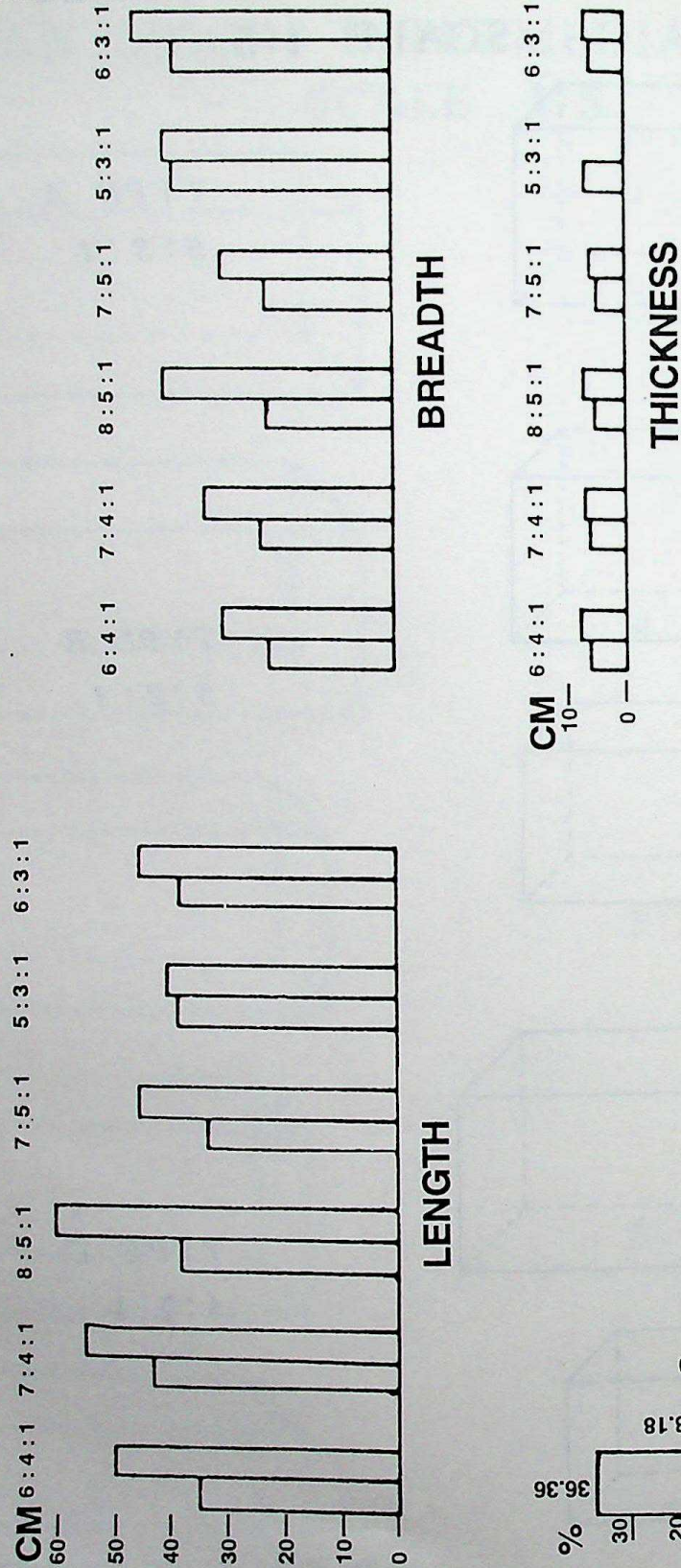
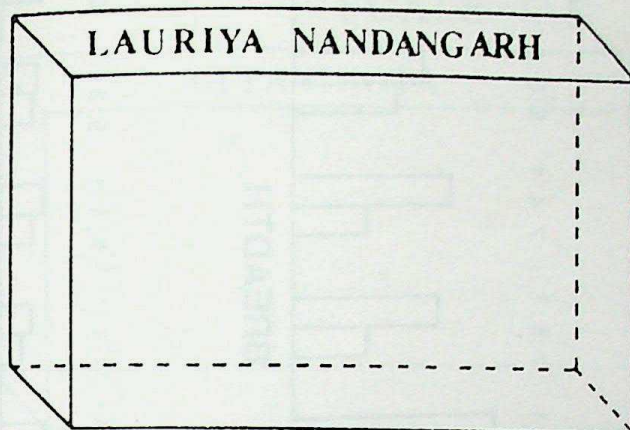


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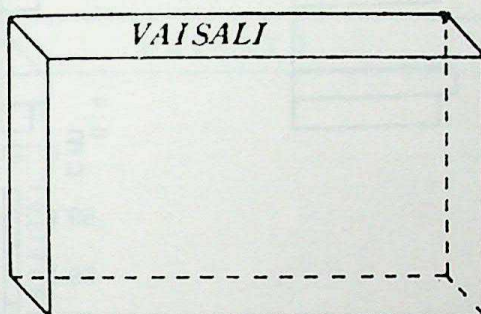


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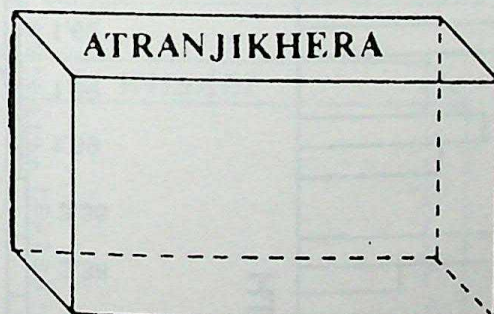
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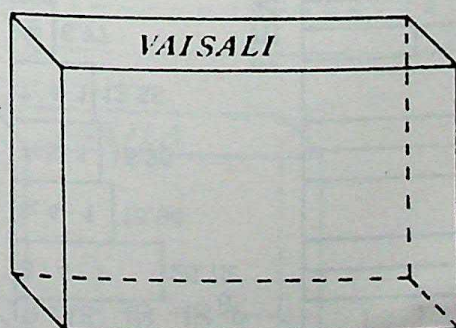
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5:3:1



6:4:1

Figure No. 8



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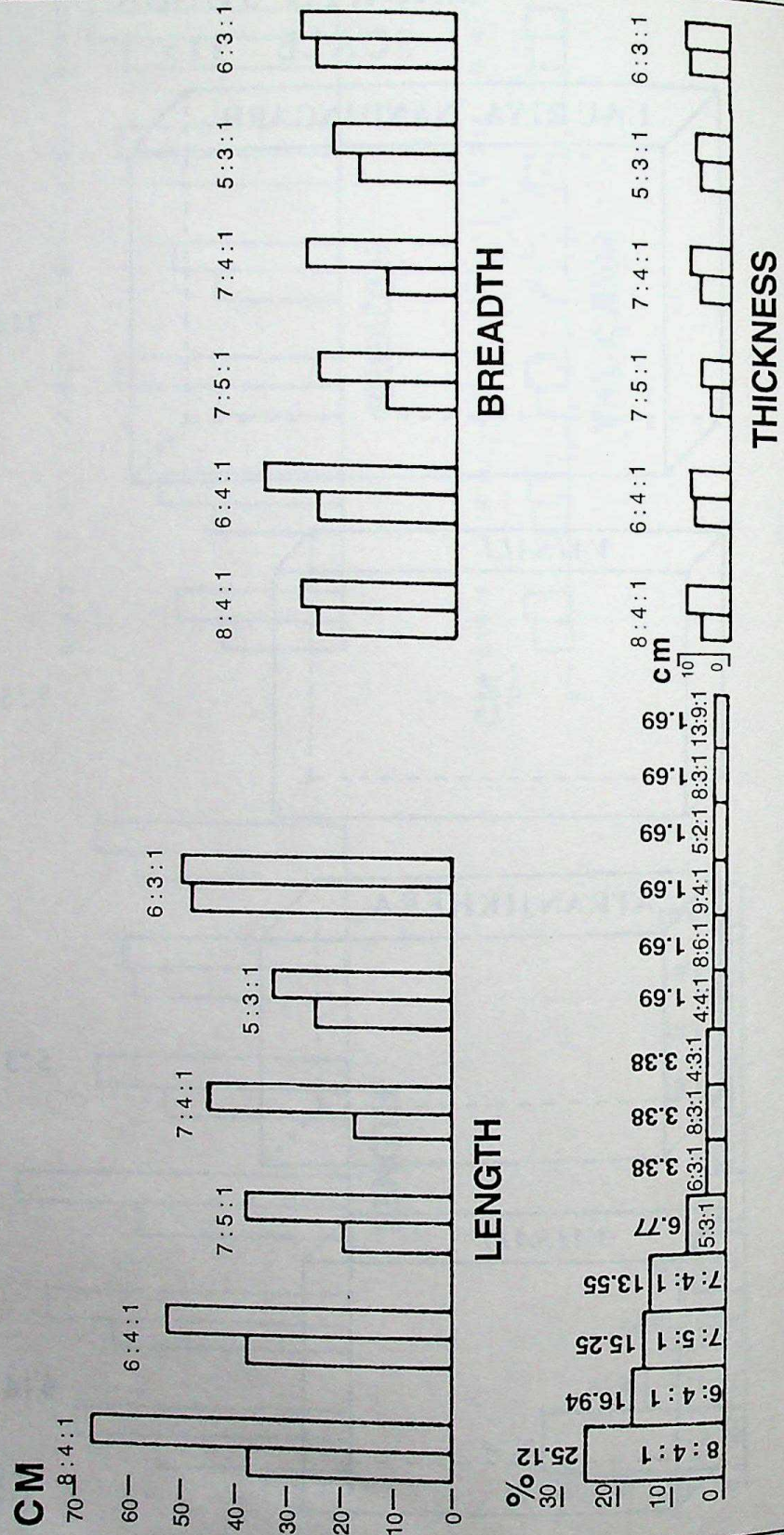
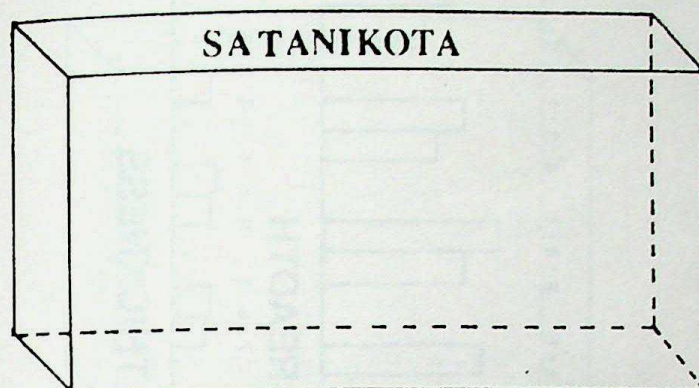


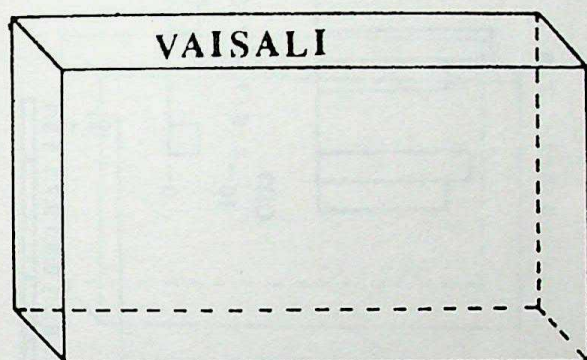
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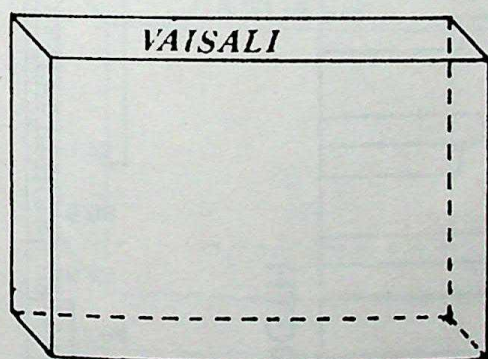
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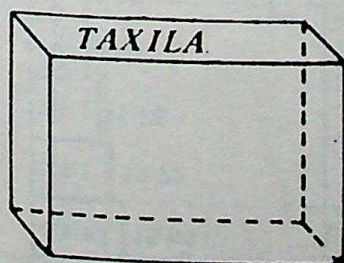
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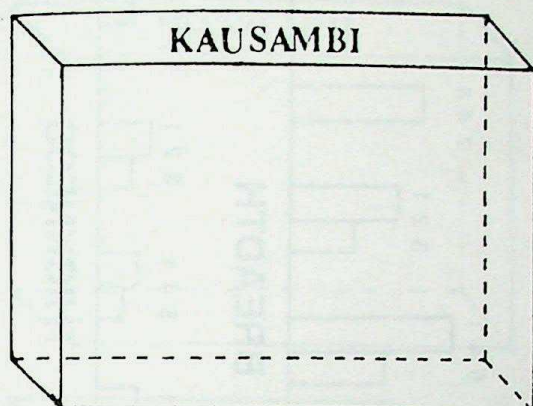
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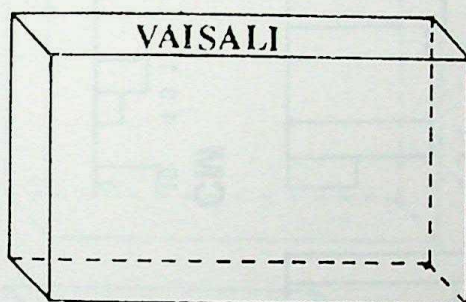
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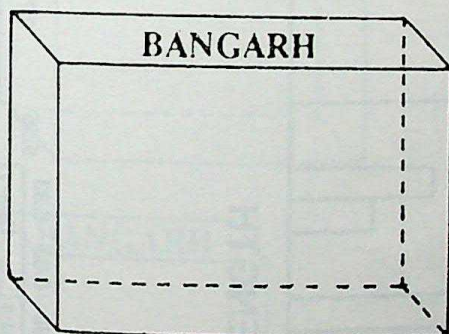
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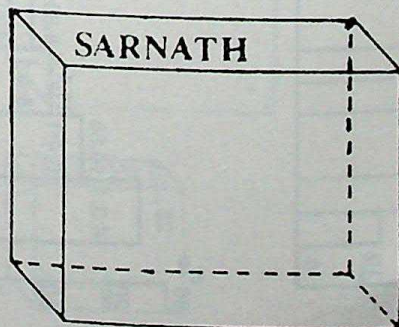
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Figure No. 12



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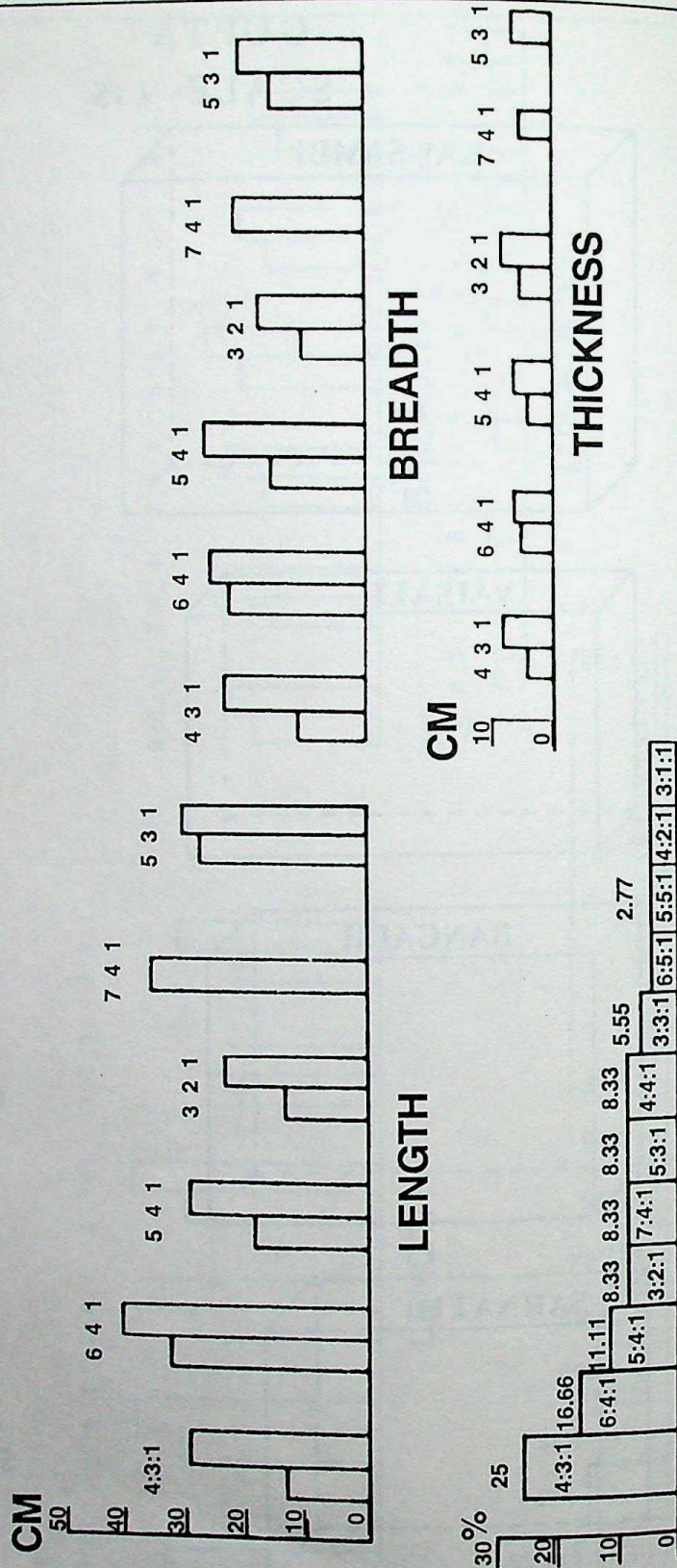
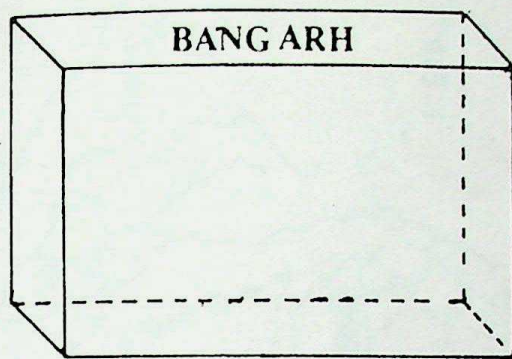


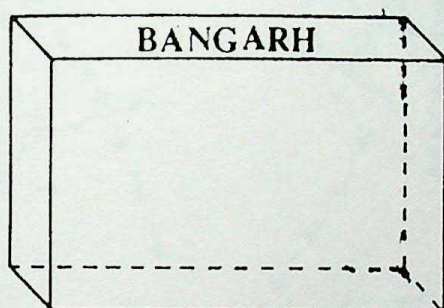
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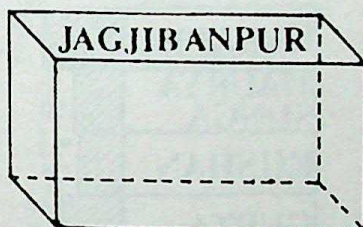
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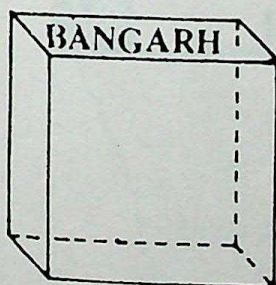
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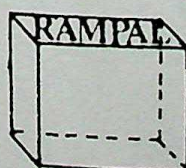
7:4:1



5:3:1



4:4:1



4:3:1

Figure No. 14



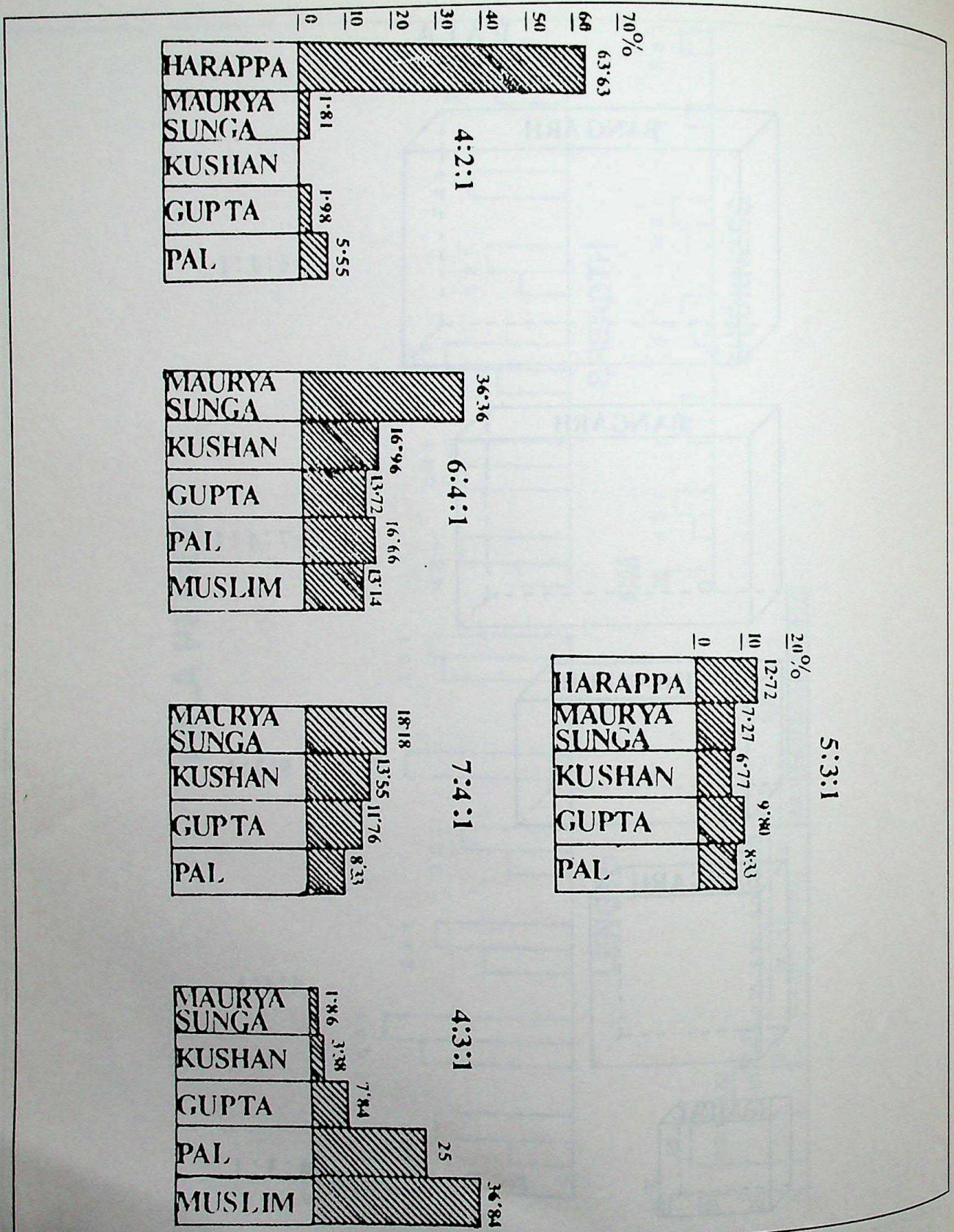


Figure No. 15



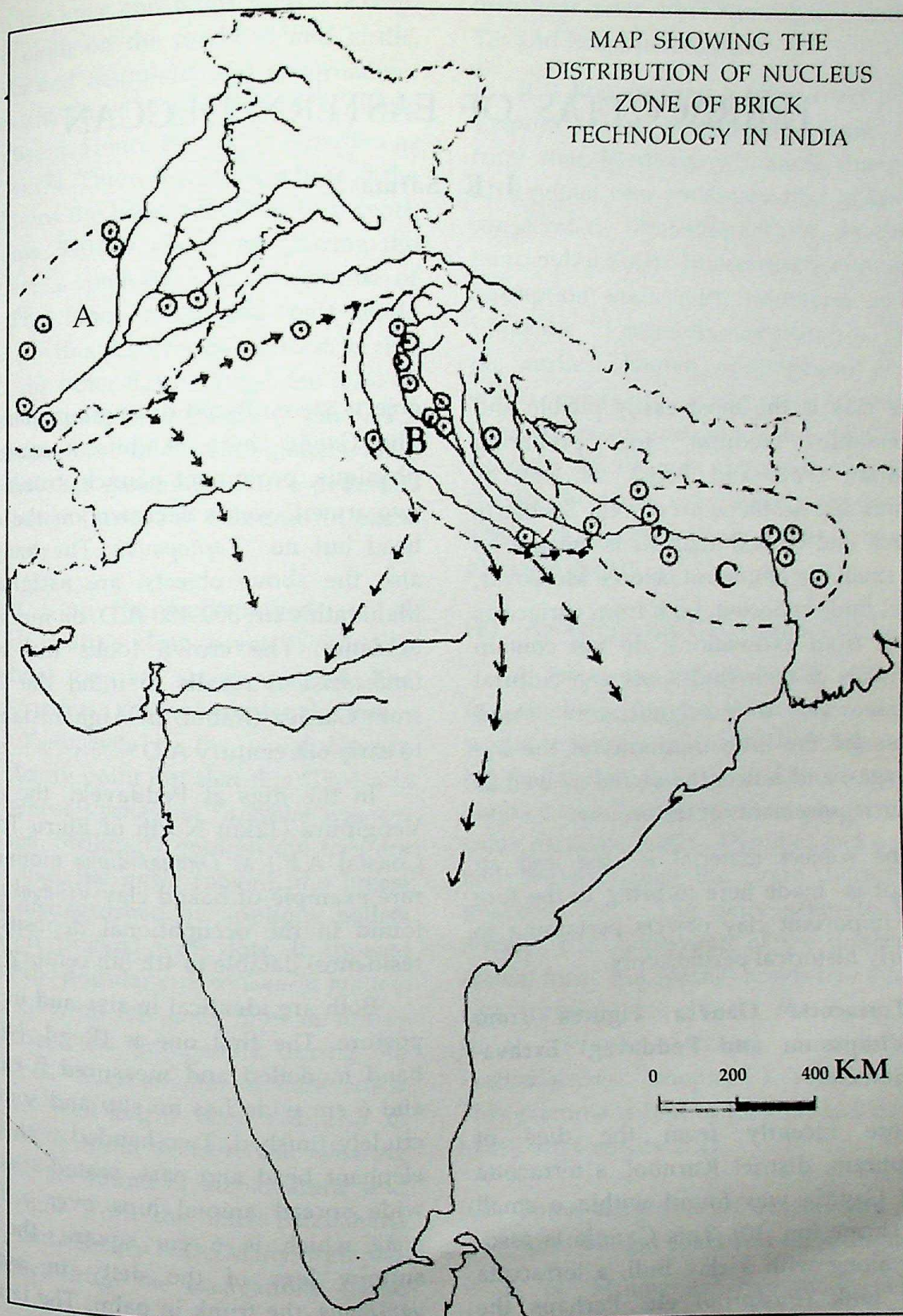


Fig. No. 33



# TERRACOTTAS OF EASTERN DECCAN

I. K. Sarma

The clay is the most easily pliable and versatile medium for preparing Utilitarian (Pots and Pans), as well as religious and aesthetic art objects. Scholarly research and critical analysis is meagre on these small but abundant objects. Moreover, several finds collected, both from surface as well as from excavations, do not contain full details of their find spots and cultural contexts. Yet they significantly stand witness for the little traditions of the by-gone ages, and reflect the sacred as well as secular requirements of the society.

The subject material is vast and an attempt is made here to bring to the fore some important clay objects pertaining to the early historical periods only.

## (A) Terracotta Gaṇeśa Figures from Vīrapuram and Peddavegi Excavations.

More recently from the digs of Veerapuram, district Kurnool, a terracotta seated Gaṇeśa was found within a small *Līṅga* shrine (no. 10). This Gaṇeśa is associated along with a clay Bull, a terracotta model tank (*Puṣkariṇi*) etc. Perhaps the

objects were offered during a ritualistic act. The Gaṇeśa here exhibits a more finer physique, prominent paunch, trunk to left, two-armed, wears a crown on the animal head but no *Yajñopavīta*. The temple, as also the above objects, are assignable to Mahārathis *cir.* 300-400 A.D. on numismatic evidence. The crown looks like a tiara (*ardhamakuṭa*) recalls to mind the Gaṇeśa from Gardez (Kabul) in Afghanistan dated to early 6th century A.D.

In the digs at Peddavegi, the ancient Vengipurā (12km North of Eluru Town in Coastal A.P.) at *Dhanamdibba* mound, two rare example of baked clay *Vināyakas* were found in the occupational deposits (in a residence) datable to 4th-5th century A.D.

Both are identical in size and in seated posture. The first one is (Regd. No. 103) hand modelled and measured 7 cm high and 6 cm wide has no slip and somewhat crudely finished. Two-handed with typical elephant head and ears, seated-at-ease on wide spread animal hips over a flattish *pīṭha* which is 6 cm square, the short stumpy legs of the deity in *ardhaparyankāsana*, the trunk in palm. The left hand



rests on the knee and holds *modaka*. Except a rolled cloth on the forehead and girdle, (*Śirāstraka* and *vastra-mekhala*) no ornamentation exists. There is no *Yajñopavīta*, mouse is also absent. Hence he can be regarded as a *Bāla Gaṇēśa*. There is a mortise hole at the underside of the base extending to a depth of 2.5 cms. This is meant for placing the deity over a pedestal or an upright of wood. The inner roughened part lends support for this feature. In contrast to this example the other figure (Regd. No. 176) of the same height and breadth (7 cm × 6.2 cms.) has the base of 5.3 cm square with a mortise hole for mounting it on a pedestal. It has a better finish and coloured in black slip, all over.

Apart from the well-marked animal eyes, a decorative cloth cover (*Śirāstraka*), the elephant ears are shown incised. The circular wristlets (*Valayas*), as also the three-stringed *Yajñopavīta* in the usual *Upavīta* fashion clearly point out that this *Gaṇēśa* is *praudha* whose *upanayana Samiskāra* was accomplished. Strikingly enough the toes are elephant like, the *nābhi* (navel), the breast part are distinguished by applique pellets which were pricked with dots. It appears clear that the popular cult of *Gaṇēśa pratima* made of clay, on the same lines as to-day was practiced by the people during 5th century A.D. Such smaller or *Bāla-Gaṇēśa* of reddish well burnt clay and also in stucco and without consort but wearing *Yajñopavīta*, are found in Maharashtra<sup>3</sup> and Andhra right from the later *Sātavāhana* times i.e. 2nd century A.D. Many examples were known from the excavations at the

historical sites like Kondapur, Kolhapur, Ter and Nagarjunakonda.

It is known from a pillar inscription at Velpura<sup>4</sup> (near Sattenapalli, Guntur District) that Madhavavarman-II during his 33rd regnal year corresponding to 489 A.D. consecrated (*Pratisthāpitāh*) a *Pratimā* of *Dantimukha Svāmi*. Interestingly enough the inscription ends with adoration to God Vinayaka "*Vināyakam namasyanti*". This is the earliest known epigraphical citation which refers to a separate shrine for *Gaṇapati* as an independent God (*Svayam Pradhāna mūrti*), not merely a nich figure (*Koṣṭha-devata*) or subsidiary deity (*āvaraṇa-devata*) as generally known to us from many places in India.

#### (B) An Enigmatic Deity From Peddavegi :

A terracotta figurine with a leonine face, snake ornaments (*Sarpabhūṣaṇas*) and seated over an out stretched legs on a hooded snake and holding lilies in her two hands is a cult object, perhaps associated to some parthian deities. The lilies and prominent breasts signify the virgin character of this cult deity. The deity seem to be a *Śivadūti*, the counterpart of the *Vaiṣṇavītic Mohini* form. But *Śivadūti* howls like a Jackal and surmised to possess the head of a jackal (*Śringāla Vadana*) according to *Pratimālakṣhaṇa* (chapter-73 verses 31-32). This example is first of its kind and datable to 4th-5th Century A.D.

#### (C) Some terracotta art objects and seals from Bengal coast and their impact :

B. N. Mukherjee<sup>5</sup> has made certain



unique discoveries from the sites on Bengal Coast which threw new light on the Cultural and Commercial contacts. He recognised, for the first time, numerous Kharoshṭi-Brāhmī inscriptions on pots, plaques and terracotta seals from "Chandraketugarh, Bangarh, Hadipur, Ataghara and Deulpos in district 24-Paraganas and Tamralipti Museum, Tamluk. Not only on the Bengal Coast but these Kharoshṭi-Brāhmī records on pottery and baked terracotta objects (circular seals and sealings) are now reported from Thailand and Bali too. It appears then that tradesman coming from north-west (Gandhara and oxis regions) moved through inland Mathura region to lower Ganga-Yamuna doab and Madhyadēśa, reached the lower Gangetic Valley of Bengal in good numbers and then took to Maritime Routes to contact the South Asian countries. They mixed up with the local Brāhmī using merchants, who were Buddhists too and developed a mixed "Kharoshṭi-Brāhmī" writing with north-western *prākritic* expressions and various types of sea-going vessels are depicted on these terracotta seals and pottery vases (corn, horses and solidiers). These objects, like the Roman wares, end up by 3rd century A.D.

A Kharoshṭi-Brāhmī bearing clay sealing depicting the *Bodhi Vriksha* sappling kept within a double mast ship is unique in as much as it confirms the Mahāvamśa account (XIV-6 and XIX, 11-12) according to which the Mauryan king Aśoka despatched, most religiously, the *Bodhi*

sappling descending into water up to neck and stood with folded hands on the shore to see off the sacred ship towards Sri Lanka.

(D) A rare figure from Vanithamandalam Dist. Srikakulam :

A potter's village by name *Vanithamaṇḍalam* situated on the northern bank of Vamśadhāra river opposite the renowned Buddhist site of Salihundam appears to be an important centre for terracotta art during the early historical periods. Several Terracotta figurines human and animal, besides toys and pottery are found strewn over an ancient mound at the site. Among several objects a standing female figure (24 cm high and 12 cm wide) is a unique specimen. It is a moulded figure wearing a floating short skirt with winged extensions, a tight blouse of sleeveless type, moderately ornamented with a *kanthika* and a simple tiara of pearls in three lengths. The Sumptuous curly hair tied into two braids is bi-partitioned and the bunches rest right on the breasts. A richly decorated scarf winds up the hair above the forehead. The hairdo, the style of the garments and standing pose bear close similarity to the post Mauryan examples from Taxila-Sirkap on the one hand, Bulandibagh (Bihar) and nearly Tamluk, Chandraketugarh specimens on the other, datable to c. 2nd-1st century B. C.

More interesting is a story that potter's boy of this place prepared lots of figures of clay - toy *rathas*, caparisoned horses, elephants and foot soldiers. When the



Sātavāhana king Vikramārka invaded the area with his army it was stated that the toy army transformed into a real one, true to life and engaged in combat and checked out the invader. According to *Gātha-Sapta Śati*,<sup>8</sup> Hala, the Sātavāhana monarch is stated to have made beautiful damsels in clay and infused life into them and greatly enjoyed. Whatever be the truth, the site deserves to be carefully excavated as the prolific surface evidence promises a rich variety of terracotta art forms and norms influenced from the centres of farther north-west as well as nearby Bengal coast like Chandraketugarh and Tamluk.

(E) Sātavāhana Ikshvāku (1st century A.D. to 4th century A.D. terracottas :

During the period, Terracotta objects, particularly miniature human figures dominate. These are made of double moulds and very expressive, round or oval faces highly ornamented rendering of the female forms simulating the relief sculptures of the periods. In particular, the facial features, head-dress and ornament cover up the stylized block-hands and legs. The double mould (or piece mould) fitted in a master cover was used in the mass production of these terracottas in round. Yelleswaram in district Nalgonda yielded fine piece moulds containing the figures of Mother Goddess, a Scythian soldier, Ram etc. They are in two pieces luted together. This technique is said to be of Roman origin. Some of the finest specimens of the Satavahana period are available from Kondapur, Peddabankur, Ter, Kolhapur, Nevasa, Paithan, Amaravati and Nagārjunakonda, in particular, to men-

tion a few sites but the entire Deccan right upto Kānchipuram in the south; these tiny female heads occur in the Sātavāhana levels.

A special type of clay, Kaoline, is also used for making these figures, possibly under the impact of the Roman influence and also lack of finer clay locally. Mother Goddess figures from Kolhapur, Nevasa, Ter and Kondapur, Yelleswaram and Hariti holding a child are quite common. The head-dress majorly consisted of a *lalāṭika*, on the forehead and beaded ornamental band running all around with a boss on either side. The smiling boy head from Nevasa is a fine example similar to Texila specimens. Terracotta suspension lamp with a bust of human figure from Ter is quite unique. Plaques depicting seated nude Goddess, headless or lotus headed but the pudendum overemphasised were found in Ter, Kondapur, Nagārjunakonda etc. These are stated to be of Greco-Roman origin. A miniature portable Buddhist shrine (hallow interior) - having *Sālabhanjikas*, *Padmaśilas*, elaborate *tōraṇas* and railing was found at Nevasa. Besides, a variety of pendants and armlets with auspicious symbols like *svastikas*, *Śrīvatsa*, *makara*, *mīna*, turned out of double moulds were found at Kondapur and Ter.

Among the deities, miniature two-handed Vināyakas from Ter show the popularity of the cult of *Gaṇēśa*, and *Gaṇēśa* worship during the Sātavāhana times. The Ikshvākus continued to produce the piece-mould terracottas in the Sātavāhana tradition. Jewellery moulds of terracotta with



variety of designs cut in them throw valuable light on the craftsmanship of Ikshvāku goldsmiths, whose extensive colony was located at Nagarjunakonda.

**(F) An Earthen Kalaśa from Kesaragutta with female deities :**

Kesaragutta village is 40 km north-east of Hyderabad on Ghatakesar road. Brick temples and cult objects of the late Sātavāhana and Vishnukundī periods were found<sup>9</sup>. The moulded pot with terracotta figurines, under discussion, is unique and of great ritualistic importance.

A globular vase with the squattish ring base, ledged rim, high narrow neck, double-ridged band, characterising the shoulder part was found at the north-western corner of the *ardhamandapa* of a brick temple. The vase has a tight screw type lid, very unique, like the figures and snakes on its body and shoulder. The excavator<sup>10</sup> feels that it was meant for consecration at "the time as raising the *śikhara* of the shrine".

The pot is wheel made but all the figures over it were caused by applique technique and finished with fingers. The surface of the pot is grey to brown smoothed by a clay wash and indifferently fired.

There are in all six female figures, five seated on the shoulder part of the pot above the ridged groove, while the sixth one mounted on the lid. The body features such as breasts, eye-lids, ears and ornaments around the neck and wrist, the hairdo (*karandika* type), were all fashioned by looting the strips or pellets of clay. The

fingers and toes are crudely rendered, the other body parts were also disproportionate to each other. All the figures are seated alike with legs in flexed position (*pralambapāda*) and hands resting over the knees. In all the figures the abdomen part is somewhat elongated, the navel marked out well but with no sign of nudity.

Besides, there exist in all seven snakes with raised hoods. They are in bold relief looted to the body of the vase. The hoods extend up to the level of the ridged shoulder while the bodies below indicate rightward movement in a *pradakṣiṇa* or clockwise direction, except in two cases at the south cardinal whereupon the right side snake occupies the body of the vase and a bigger one is centrally placed above the shoulder. This south cardinal, may it be noted, has no female figure and instead a bigger snake is specially placed on the shoulder, perhaps to symbolise *pātāla*, the nether-world.

**(i) Frontal view : East Cardinal :**

The top figure facing east is mounted on the lid over an *aṣṭadala padma*. The female figure is actually seated on the coils of a snake. The legs of the figure rest on the two frontal petals. The hoods are broken at the joints. The figure is grotesque looking with receding forehead bulging cornea, elongated ears and teeth partly exposed.

Two more figures are placed on the shoulder part, one at the south-east and the other correspondingly at the north-east corner. The figure at the north-east is seated



above the hood of the snake. The south-east figure has an expressive face stylistically turned to right. In this very example the headgear the *kanthābharaṇas* and ear-rings are clearly seen in applique bands.

(ii) Right side view (South Cardinal) :

There is no human figure, instead on the shoulder part is a snake centrally placed, its body coiling round the neck of the vase, and touched the prominently raised hood. Two snakes with hoods above the ridge and tails extending in juxtaposed way occupy the body part of the vase.

(iii) Corner view : South West :

Over the shoulder part is a female figure (knee part downwards broken). Only the body of the snakes from two angles meet at this point.

(iv) Rear view : West Cardinal :

This corresponds to the back of the

crowning figure over the lid. In the lower region, above the shoulder is the female figure centrally placed and seated at ease, while the snakes with prominent hoods to the left, in both cases indicate a rightward movement.

(v) Left side view : North Cardinal :

The female is seated and somewhat elegant (*saumya*) in appearance. The legs rest on the upper ridge. The body of the snake, moving to right, is shown below.

The above vessel, cannot be regarded merely as a *nidhikalaśa* or *garbhā pātra* as held by the excavator. The *Nāgas* and deities are oriented to the regents as well as corners and stand for *adhidevatas* as well as *Pratyadhidevatas*<sup>11</sup>. The evidence along with other associated cult objects should be taken as integral to the *āgamic* rituals of 3rd-4th century A.D. archaeologically documented for the first time.



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# TERRACOTTA ART OF WESTERN DECCAN

C. Margabandhu

Geographically the region of western Deccan was an area largely controlled by the emergence of Satavahanas<sup>1</sup> from about the early second century B.C. in the wake of the decline of Mauryan power in north India. Their sway extended in the hey day of their power to a large part of the Peninsula and at times extending to coast to coast on the east and the west.

They established Paithan<sup>2</sup> (Pratisthana) as their capital. The Satavahanas ruled their extensive kingdom for about four centuries not only as a centre of unified political power but also contributed immensely to the growth and development of many artistic traditions in the various fields of architecture, sculpture and also innovations in art forms in variety of materials among which those in terracotta<sup>3</sup> constitute the largest.

As a matter of fact the all round cultural development should be viewed in the simultaneous spurt in the growth of trade and commerce under the Satavahanas specially the maritime trade with the western world<sup>4</sup> that brought in not only considerable wealth but also possibly

resulted in import of many objects of western origin (Alexandrian and Roman) specially in terracotta<sup>5</sup>.

It is also necessary to analyse and assess the artistic traditions prevalent in pre-Satavahana times<sup>6</sup> and whether they had any impact or influence subsequently. A number of sites in the region excavated have not clearly revealed the prevalence of common techniques and cultural types in art forms that could be distinctly identified and classified. It does not mean that no artistic objects were found. There are quite a few types of terracottas found from various sites datable to the pre-Satavahana times. What can be emphasised that they do not fall into a uniform pattern to classify them as part of artistic modelling and further continuity. Now more evidences are available which will be assessed and analysed later.

It was with the coming in of the Satavahanas there is evidence of new thrust of artistic activity specially of a creative nature and terracotta art gets the best support. Indeed this was the finest period of stupendous artistic activity that culmi-



nated in adopting new techniques that continued uninterrupted for subsequent three to four centuries or so. There were also many notable art centres in the Deccan such as Bhokardan<sup>7</sup>, Brahmapuri<sup>8</sup> (Kolhapur), Dhulikatta<sup>9</sup>, Kondapur<sup>10</sup>, Nevasa<sup>11</sup>, Paithan<sup>12</sup>, Peddabankur<sup>13</sup>, Sannati<sup>14</sup>, Ter<sup>15</sup>, Vadgaon-Madhavapur<sup>16</sup>, etc. Other sites which have yielded Satavahana terracottas include Amaravati<sup>17</sup>, Banavasi<sup>18</sup>, Dharanikota<sup>19</sup>, Kausan<sup>20</sup>, Nagarjunakonda<sup>21</sup>, Salihundarn<sup>22</sup>, Satanikota<sup>23</sup> and Yelawaram<sup>24</sup>. Among them Paithan and Ter were notable artistic centres as revealed by the rich variety of terracottas, while other places where terracottas were prepared include Bhokardan, Brahmapuri and Nevasa. Fresh evidence from pre and early Satavahana levels at Dhulikatta, Kotlingala and Peddabankur connect the cultural link of the continuity of artistic traditions.

Satavahana terracottas mark a distinct technological advance for the technique employed in the fashioning of terracotta figurines is a highly specialised one and mark a departure from the technique followed earlier in the north, specially the Gangetic valley. The characteristic feature which distinguishes them from others is the material from which they were made of, since black cotton soil of the region is unsuitable for making terracotta figurines. The clay artists have to go in for some other alternative medium. It was Kaolin<sup>25</sup> available in the Deccan came in handy as it is a much finer material than clay specially its plasticity and durability. In this medium the figurines "have been characterised by

bold and vigorous physiognomy and extremely sensitive modelling and also noted for their dynamic vitality and plastic simplicity of form<sup>26</sup>. Apart from Kaolin, clay was also used for modelling of the objects of everyday use including those of utilitarian value. There is a difference between those made in kaolin and clay; those prepared in the former are more impressive and realistic with bold expression and sensitive modelling, whereas the clay ones lack some of the finer features.

In manufacturing terracottas, a highly specialised technique was employed consisting of the use of double mould<sup>27</sup>, (pl. 1, 2) one for the front and the other for the back side, in order to have objects in round like free standing sculptures but with hollow interior. A thin layer of clay was pressed into these moulds and the casts recovered from them were joined later together. Some of them have holes in the body for they were made for letting out the inflated air due to heating. Those that were made in this process were found with joined strips of clay adhesives when fired leave an impression. The very fact that this technique of preparation was not found adopted in other sites elsewhere support the contention that it was typical to Satavahana idiom. There is an argument supporting its origin<sup>28</sup> from elsewhere and one of them is that this technique was adopted as "a fully developed one from about the first-second century A. D. when the enterprising traders from the west were busy in exchanging their products with those from the Deccan." The technique was



also adopted in manufacturing terracottas at other sites such as at Nagarjunakonda and Yeleswaram but there is a decline in the process of modelling and preparation and also in decoration possibly due to lack of good kaolin available locally.

The terracottas prepared in this technique are diverse and specific. They include male and female figurines both plain and decorated, Mother Goddess or yakshis in varieties of postures, couples, figures seated on animals such as elephants and bulls, and animals identified include bull, horse, elephant and ram and birds such as cock, sparrow, etc.

Generally, the male and female figures are robust with prominent features and the 'modelling'<sup>29</sup> is quite realistic. Some typical characteristics distinguish them from others in depiction. The male figures are represented in squatting position holding on right hand a bunch of fruits with a bird on the left. (Pls. 3, 4, 4A). They are heavy and ponderous gait, prominent belly with deep indented navel and genital organs. (Pls. 5,6). They are made infusing with expressive vitality and plastic simplicity of form. A few have foreign ethnic features specially Roman<sup>30</sup> for example the face in a suspension lamp is quite typical; (Pl. 7) other include charming smiling child faces<sup>31</sup> (Pl. 8) with typical ruffled hair styles and others with rare decorative features.

The female figures are depicted in full bloom of youth (Pls. 9, 9A) with plump face, heavy body, wide nostrils and thick lips, in seated position holding a parrot or

the bird pecking at the lady's breast, while she holds a bunch of mangoes on the other hand. (Pls. 10, 19).

The jewellery worn by them are also equally typical. Simple adornment consist of a forehead band with a central jewel, sometimes on both sides of the head; the whole mass of hair tied up in an elongated roll at top. Some have bi-cornate head-dress, while others have hair gathered and knotted in peacock-plume fashion (Pls. 11, 12, 12A). The necklaces are worn in two or three strands with a medallion at centre or bead strings entwined with in-between spacers with hanging pendants in leaf or amulet shapes. Some wear in *upavita* fashion with cords and amuletic pendants studded in them. Armlets and bangles are both plain and decorated. Girdles are of two-stringed variety, both plain and with designs, while anklets are plain and simple (Pls. 11,12).

The dress consists of a lower garment, a sort of short dhoti flowing down knees and tied round the loins with its front pleats taken at the back and tucked in. The girdle holds the garment tight.

An evolutionary development of the terracotta art could be gleaned by the evidence at Nevasa<sup>32</sup> in the time of latter half of the first century B.C. and the second century A.D. The terracottas from early levels are hand-made and crudely fashioned. Some of the female figures have pinched faces, while a few are painted in red ochre. In later levels are found female figurines or Mother Goddess type made



from double moulds fashioned in squatting position with hair depicted in two chignons and wearing typical jewellery. Similar and identical figures are reported at many other Satavahana sites suggesting many centres or potter's workshops for manufacture and modelling. In view of their similarity and features, it has been suggested that they may represent village deities so common in the Deccan. At Brahmapuri<sup>33</sup> they were found both seated and standing holding in one hand fruit, while the other resting on knee. Bhokardan<sup>34</sup> has yielded female figurines made from single moulds, some of which are coated with red ochre. Some are also hand-made and are quite distinct with pinched nose and mouth with rigid features.

It is also to be emphasised that a large number of figures were also found at other sites in contemporary levels characterised by what are called archaic features. They form a class by themselves and they occur in larger geographical area in central and western India<sup>35</sup> in early historic sites and also pre-Satavahana in chronological parlance.

They are small, modelled by hand have semblance of a human figure and prepared without emphasis on facial features and limbs characterised by 'archaic' traits.

In fact, Peddabankur<sup>36</sup> and Dhulikatta have revealed evidence of these 'archaic' figures and other terracottas with evolutionary features and in varieties, some with distinct characteristics furnishing new cultural links and artistic traditions.

The early levels at both the sites have yielded the figurines, both human and animal with 'archaic' features hand-made by pinching clay to desired shape. They have been identified as cult figures. They are prepared out of a simple lump of clay pressed by hand with top portion making the head with round features, pinched nose and eyes executed in applique'. The breasts, hands and legs were drawn out like pointed spikes. In many of them, they have a circular or 'wavy' hollow around the head possibly indicating the hair bun at back. The modelling of the features so artistically done that they possess some refinement as to hardly call their 'archaic'. This type occurs in large number at Peddabankur in levels datable to third century B. C. and after (Pls. 13, 14). Other sites in this region which have yielded this type of terracottas are Dhulikatta, Nagarjunakonda<sup>37</sup> and Yeleswaram<sup>38</sup>. It is significant to emphasise that these 'archaic' terracottas continue to occur along with the refined ones prepared from double mould simultaneously in most of these sites.

On the eastern side, the largest number in varying types occur made from double moulds. Peddabankur, Dhulikatta, Nagarjunakonda and Yeleswaram add new types hitherto not known in sites of western Deccan.

In fact they are typical and characteristic to the region as to call them local types. Indeed they add new dimensions to the Satavahana terracotta art and possibly these sites are main centres of manufacture of such artistic terracottas, since many



moulds<sup>39</sup> (double ones) have been found of both human and animal figures. (Pls. 15, 16). Foremost among them are the female figures identified as Mother Goddess type which fall into three distinct groups<sup>40</sup>. The first are those which consist of figures with outstretched hands and arms lifted with typical double makara-shaped hair dressing secured with a hand in the middle<sup>41</sup>. (Pls. 15, 17, 18). In fact Nagarjunakonda (Pls. 18, 18A) and Yeleswaram have yielded quite a large number with lavish decorations and the modelling quite sensitive. Moulds<sup>42</sup> have also been reported from Yeleswaram (Pl. 15) and one of which is a complete specimen. The face and the hair style are quite typical and indeed characteristic of the terracottas of this region. Both these sites have yielded them in Satavahana levels and later Ikshvaku times up to the fourth century A.D. Chebrolu<sup>43</sup> has yielded a large number of them in full form. The ornaments such as necklaces, girdles, armlets are quite typical of the Satavahana idiom.

The second type made from kaolin at Peddabankur<sup>44</sup> is of the well-known Mother Goddess type popular of Satavahana genre reported both in sites of western and eastern Deccan. She holds a bunch of fruits on her right hand, while a bird (parrot ?) perched on her right arm nudging her breast. (Pls. 10, 19). The figure is profusely bejewelled which is a typical feature known from most of the eastern sites. There is no clear evidence whether the figure is clothed in transparent dress but in most of them nudity has been emphasised.

There is a distinct difference in the depiction of hair-dress of these figures which has to be stressed. Unlike the head-dress of the figures in western Deccan female figures in this type have bi-cornate head-dress of the double makara shape tied with a central knot similar to the head-dress of the first variety. Some typical terracottas in this type are found at Nagarjunakonda<sup>45</sup> with the face in round sensitively modelled with the typical hair-dress. One has a half smiling lips and closed eye lids impressively depicted. (Pls. 18). At the same time the usual type with flowing hair made into a back knot also do occur in quite a number at Chebrolu, Nagarjunakonda and Yeleswaram, apart from Dhulikatta and Peddabankur have yielded them on the eastern side (Pls. 15, 18). The third type of Mother Goddess found at Dhulikatta<sup>46</sup> is of finely levigated clay. The figure holds her prominent breasts with her hands from below. She is depicted smiling with parted lips, narrow eyes and bulbous cheeks. She wears an *yagnopavita*, torque around neck, beaded fillet over the forehead with a prominent central jewel (Pl. 20). The decoration is in typical Satavahana style and is one more new feature known in the eastern sites.

Many new depictions in terracotta are also known from Peddabankur made in kaolin. One represent a figure with boyish features and turban-like headgear<sup>47</sup>. Another is a yaksha<sup>48</sup> in a dome-shaped frame with inside hollow and wears a broad beaded fillet over the forehead, bulbous eye and parted thick lips. The head is enclosed



by possibly tongues of flame or rays spread out. The body below the loop is incised with a lotus sign.

Apart from them, a number of female and male terracottas have been found at Peddabankur<sup>49</sup> with well-modelled facial features preserved only with the head. The male ones possess broad eyes, parted lips and wear turban, like head-dress; female figures are well modelled, broad eyes and short nose, small lips and wear crescent-shaped ear-ornaments jewel tucked at knotted hair and a torque around neck. An interesting face is that of a girl naturalistically modelled. All these are suggestive local types made in double moulds and constitute the best of those known on the eastern Deccan sites. Terracottas depicting mother and child in which the child is held in left arm while the right hand hangs down is a typical motif reported at many sites<sup>50</sup>, indicating its prevalence either as a votive motif or a propitiatory cult object used in worship.

Among other types of terracottas, Satavahana artisans specialised in modelling of animal figures<sup>51</sup> with realistic and sensitive portrayal and some of them are considered classic and superior to any of them produced later. Extreme care was taken to model new features and special types were introduced, such as the group compositions with parallels in contemporary sculptural art that was quite popular in Western Deccan rock-cut architecture. The animals that were depicted in the technique include elephant, horse, bull,

boar, monkey, fish, crocodile etc. Among the birds are cock, sparrow and others of non-descript type. The most popular among animals are the horse, elephant and bull. The best of them include the modelling of elephant and horse riders in group composition (Pls. 21, 22). The riders are possibly royalty, gentry or warriors with typical ornaments and dress including weapons such as daggers, bows and arrows. Apart from them riders depicted include couples or mithunas in typical Satavahana dress and jewellery, a motif which was also found in the contemporary sculptural art. The best of them are reported from Kondapur, Paithan, Sannati, Ter, and Vadgaon-Madhavapur.

Some interesting new types of animal figurines have been known from Dhulikatta, and Peddabankur<sup>52</sup>. The early ones reported from early Satavahana levels are made solid but crudely prepared modelled by hand. They are labelled as 'archaic' in features and are similar to those human figurines<sup>53</sup> found in contemporary levels. Animals represented in this category include elephant cow, bull, ram, etc. and birds such as cock and sparrow.

These made from double mould are of a different type reported from Nagarjunakonda<sup>54</sup>, Yeleswaram<sup>55</sup>, Dhulikatta and Peddabankur<sup>56</sup>, Yeleswaram<sup>57</sup> has yielded a large number of double moulds such as of ram and bull unlike the 'archaic' type, these are more refined with the ornamental decorations, sensitively modelled with realistic features. It has to be



stated that such figurines continue to occur up to Ikshvaku times in the Eastern sites (c. fourth century A. D.).

A typical motif representing a plaque of a nude female figure with spread-out legs and displaying pudenda known in popular parlance as 'Lajjha Gauri' figure has been studied in detail in respect of its spread, and chronology has been reported in most parts of central western and south India except Bihar, Bengal and Orissa and "it is obvious there still remains quite a few questions regarding the identification, statue, affiliation and disappearance of the intriguing Lajja Gauri to be ensured<sup>58</sup>.

Apart from the specific types, there are many others which have been found specially of religious in nature, both bearing on Hindu and Buddhist affiliations. They comprise of figures of deities, Buddhas, Bodhisattvas, lingas and other medallions with secular themes known from Kondapur, Nagarjunakonda, Nevasa, Sannati, Salihundam, Ter, Vadgaon-Madhavapur, Yeleswaram, etc. They represent flat plaques as well as those made from double moulds, some of which also belong to late Satavahana times.

In so far as the development of terracotta art is concerned more evidence from the sites on the eastern Deccan and south-east coast in the form of new types and varieties throw significant light both from the point of view of chronology and cultural diffusion. Some sites in western Deccan have yielded evidence of terracottas datable to pre-Satavahana and early

Satavahana times which enable to reassess and evaluate the artistic development.

Sites such as Bhokardan, Nasik, Nevasa, Paithan, Vadgaon-Madhavapur etc. have yielded evidence of cultural remains earlier to Satavahana times datable from about fourth-third century B. C. But the details of the finds specially of terracotta are quite scanty. Bhokardan and Nevasa have revealed terracotta from early Satavahana levels which are hand-made and flat plaques which are crude in finish. At Vadgaon-Madhavapur, the settlement goes back to the fifth-fourth century B. C. Supporting evidence of terracotta are datable to early Satavahana times. The figures are hand-made and some are modelled, but crude in appearance from about the latter half of the first century B. C. There is evidence of the adoption of double-mould technique and gradual increase and spread of them, both in types and varieties. In other words there is already existing the art of terracotta, though not developed and in incipient stages ; when the process of double-mould is introduced it does not require much time to adopt and create the forms suitable to the taste and requirements. This urge of creation is reflected in numerous varieties with sophisticated modelling of a far superior type, not known or produced till that time. What is necessary to emphasise that unless there has been existing a tradition of modelling with long experience, the introduction of a few technique is not likely to yield, better artistic creations and hence the double-mould technique came in very handy



which resulted in such creations of rare quality in numerous varieties without sacrificing the level of artistic creativity.

The technique is also adopted at many centres of manufacture gradually supported by craft guilds within a period of half a century or so.

In so far as the evidence of sites of eastern Deccan and south-east coast some interesting data emerges in particular on the pre and early Satavahana terracotta art. The early ones found indicate a well developed art going back at least to the latter part of the third century B. C. The hand modelled and moulded figures especially the 'Mother Goddess' type with archaic features has a developed artistic tradition exhibiting the local features of a distinct type.

All these sites are situated on the lower Krishna-Godavari basin and possibly had cultural links and commercial contacts as the settlements were situated close together. When the double-mould technique was adopted for modelling the sophistication of the terracotta art reaches a high level of development which could clearly be distinguished.

Apart from the modelling of human and animal figures with characteristic features of western Deccan types fresh and new innovations were introduced by the artists with existing local features as testified by varieties of Mother Goddess figurines found. The dress and ornaments too are typically regional in character,

specially the hair style of the female figurines and the various postures in which they were depicted. The robust and sturdy features were replaced by soft and tender nature of modelling especially the graceful female heads found at Nagarjunakonda, Peddabankur and Yeleswaram reveal. It is enough to state that the introduction of double-moulds accelerated the technique of modelling with new artistic features thereby experimenting on new themes and depictions not produced earlier. Terracotta made with these features continue up to Ikshvaku times. (c. fourth century A. D.) on the sites of south-east coast.

Fresh evidences in recent times from excavations of early historic sites of Tamil Nadu reveal interesting cultural data of the extent and spread of Satavahana terracotta art is a matter that require analysis. Arikamedu, Kanchipura, Kaveripattinam and Uraiyur have yielded terracotta human figurines. Prepared from double-moulds and datable to third and fourth century A. D. At Kaveripattinam<sup>59</sup> both male and female figurines have been found which significantly reflect the contemporary style of the Ikshvaku tradition as prevalent in Nagarjunakonda and attributed to the advent of Buddhism in the South. They are datable around the early fourth century A. D. if not slightly earlier. Some fragments of the legs of male figures also recall the similar yaksha figures found in Nagarjunakonda with arms akimbo and in squatting position – a feature similar to terracottas from sites of Ter and Paithan. Kanchipuram has yielded typical human



figurines and the town has revealed structural remains of Buddhist affiliations. Uraiyur<sup>60</sup> has yielded at least two human figurines prepared in double-mould. All these are not stray finds but reported from stratified levels of about third-fourth century A.D.

Recent evidence of finds of terracottas in Coimbatore region connect the cultural link further. Explorations have revealed in sites of Boluvampatti<sup>61</sup> (Dist. Coimbatore), Indur, Kotikarai, Madlampatti and Panaiyakulam, (all in Dist. Dharmapuri) numerous male and female figurines datable to fourth-fifth centuries A.D. They are mould made solid and details finished by

hand. Decorations were made by dents and incisions with great care. Some female figurines have naturally rendered hair style but none has been found complete and mostly the lower part broken. What is quite notable and significant is the pose and form such as upraised arms, and seated posture evidently recall the Yakshi and Mother-Goddess types of the Satavahana idiom. But the technique of preparation is that of single-mould and so far hollow figurines are yet to be reported in these places. It is pertinent to emphasise the spread and extent and cultural penetration of Satavahanas but it require more data to assess the impact.

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## TERRACOTTAS OF THE FAR - SOUTH: (Karnataka, Tamilnadu and Kerala)

Choodamani Nandagopal

### The terracotta drum beats:

The beats on the earthen pot is a manifestation of the courage of the craftsman of the by-gone era and the application of the rhythm to a pattern of sensitive rendering by a drummer. These beats are echoed in the daily life of the rural folk, in the work of a master, in the environs of an industry and in almost everything that is made of the *panchabhutas*, the five primordial elements. The pot made of baked clay is the most simple and common utilitarian object for a villager. The process of transformation of mud into a pot and the use of pot for the purpose of music is a unique feature of Indian civilization.

The motion of the potter's wheel depends on two aspects. The dynamism of *purusha* in the form of the motion of the wheel and the *prakriti*, the innate tangibleness in the form of mud. The *agati* the stationary position comes into action, that is *gati* where the movement of the wheel is initiated from the centre to the

circumference. With the fusion of the *agati* and *gati* and the *prakriti* and *purusha* the momentum picks up. The *sthiti* that is the state of a momentum in a particular rhythmic circles allows the potter to give the required shape for the clay. *Sthiti* controlling mode between *gati* and *agati* is the state of transition. The potter skillfully takes the advantage of this transitional phase by pressing the mud with his nimble fingers dipped in water often and back on the clay, and the clay evolves into a round form. His mind, heart and hands fondly creates a unique object compiling *panchabhutas* in the form of material aspect.

This pot when used as a drum is the striking result of a process, where the unique transformation of primordial elements epitomised into an art form. The very substance of the terracotta drum is the earth -*prithvi*, the water-*jala* gives fluidity for creating the form, when it is baked in fire the *agni*, it gives a quality of integrity to mud as well as water, the hollowness of the pot is filled with air—the *Vaya* and the



pot wholesomely looks at and placed in the space – the *Akasha* for its useful rendering. This kind of philosophical dichotomy of our understanding is a common principle (a *sutra*) for our potter to earn his lively hood. But the beats created on this timeless and ageless symbol in terracotta is all empowering. Lord Siva himself dances in ecstasy to the tantalising beats of this terracotta drum. His eternal dance echoed in the cosmic activities of the universe. In his mystic dance of creation, symbolising the activities of the universe. In his mystic dance of creation, symbolising the perfect joy he controls, destroys and renews at his will. The terracotta drum with its few variations are observed here as one of the major accompaniment for rendering the rhythm to the cosmic dance of Siva.

The pot-shaped terracotta drum, the opening covered with hide was known as *dardura* in ancient times and in present context is *ghata*. An early Chalukyan sculpture from Virupakslia temple, Pittadakal, depicts Siva dancing on a large sized *apasmara* for the beats of a terracotta drum, the *dardura*. *Trighata* or *Tripuskara*, the three faced terracotta drum was played with high skill and technique. A very clear picture of three faced drum is seen as the accompaniment for dance of Siva in a loose sculpture of Aihole. The figure of the drummer is more specific, as the structure of the drum, the placement and the seating position of the drummer is very clearly brought out. Another reference of a *Tripuskara* is in the Nataraja Panel in the ceiling of Aghoreshvara Temple, Aralu-

guppe, Karnataka of 9th century A.D. The drummer has just ended a syllable in accordance with the pose of the Lord of dance.

The five-faced drum, the *Panchamukha Vadya*, known as *Kudamula* made of light wood has a pot-shaped, terracotta resonator. The original version of the *Panchamukha Vadya* was a big size terracotta pot with five openings. The one such drum preserved in Madras Museum was played in the temple music. The five openings of the drum is named on the five faces of Siva. The central one is the *Sadyojata* and the peripheral are *Isana*, *Tatpurusha*, *Aghora* and *Vamadeva*. The terracotta drum uses very large in size and heavy and mounted on the wheeled carriage. This five-faced drum is found in a panel in the Nataraja Temple Chidambaram. All these terracotta drums were traditionally played to accompany the *Tandava Nritya*. *Mridanga* as the name suggests, was originally made of baked clay. The earliest smaller size of *mridanga*, the two faced terracotta drum held horizontally, is noticed in the hands of *sivagangas* of Badami.

The terracotta drum is not just confined to antiquity as discussed, earlier but it continues as a living tradition in South Indian music, as '*ghatam*'. The mouth of the *ghatam* is narrow and not covered with a parchment unlike the *dardura*, *tripushkara*, *panchamukha vadya* and *mridanga*. The '*ghatam*' takes its shape on potter's wheel by using special kind of clay found only in Panruti and 'Mana Madhurai in Tamil



Nadu. The proportion of mixing of clay with iron filings is known to only those families of potters residing in these places. The clay pots are baked in consistent temperature. The 'ghatams' made here are strong, durable and resonant. Like the bamboo flute, *ghatam* is made of single homogeneous material i.e. baked clay without having any detachable parts. It is an *upatala uadya*, a secondary rhythmic instrument.

The performer who plays on *ghatam* places the instrument on the lap and taps it with his wrists and all the fingers, gentler and forceful strokes are given at the neck, centre and bottom. The mouth of the pot is sometimes pressed against the stomach of the performer and resounding strokes are produced. When the recital reaches a climax of high tempo, the instrument is thrown up in the air and caught successively in consonance with rhythm. This terracotta musical instrument binds thousands of people at the time of recital. In fact the audience would be counting the beats and just longing to experience this awe-inspiring moment of the terracotta drum thrown up in the air.

The terracotta pot shaped drum is also used by rural folk in their concerts of folk music. The twelfth century literate Harihar, the pioneer of blank verse in Kannada literature, gives a vivid picture of a devotee dancing for lord Siva in Kannada literature to produce rhythm and dances spontaneously. Siva was pleased to see such a dance of eternal devotion and was

inspired by the drum beats and he too danced before him. Striking a unique pose of stepping with one foot the *patala* and with the other foot raised straight towards Brahmanda (the cosmic space) in great joy the lord of dance concurred the rhythm of pots played by Gundayya. The proto-type of this terracotta drum in Andhra Pradesh is known as 'Gummati' (originating from the resonating sound of 'Gummati' which is placed in folk story-telling discourses popular as 'Burakatha'. All these references indicate, the way the pots were put to innovative use in producing sound and rhythm in enriching the life and sensibilities of the people in the South Indian states.

### The ritual use of pots :

The ritual of life binds on everyone from birth to death and link him with the whole of which his human presence is an emblem. The mother earth has a solemn role in the form of baked pots which is consecrated and propitiated in most of the rituals where the auspicious beginning is to be made. More than anything clay in India has a sociological basis. For worship if no image is available, a water pitcher does the duty and it is called the '*Mangalaghata*' the good omen.

The marriage *upanayana* and vedic rituals specify the number and size of the pots. The *navadhanyas* (nine types of cereals) are mixed with mud and filled in these pots and the moulds covered with lids for three days. The seedlings sprout and symbolize the concept of fertility. Even the posh area of the city has a shop where these pots are



sold and it is in demand during such occasion. So also at the funeral. The *Kartru*, who performs the rituals carry in front of the procession a pot containing the fire, symbolising the merger of the mortal body into *panchabhutas*. In present days also in Pangola a remote village in Kerala, Pot moulded with breast like protuberance, a symbol of the Earth Mother, used in archaic vedic rituals. Such pots are found in the small museums and private collections of western coast South India. *Kalasha*, *kumbha* and *ghata* originating from the ritualistic pots are the auspicious symbols of South Indian culture.

#### Terracotta figurative art:

Indian states such as Bengal, Uttar Pradesh, Gujarat, Orissa, North-Eastern states and Madhya Pradesh have a very rich heritage of Terracotta art. Where as the figurative terracotta art of South Indian states fall back with limitations. After a survey and study of the whole range of terracotta objects of South India, an effort is made here to bring them into four broad categories as they stand in the state of ageless and timelessness.

1. The excavated sites belonging to neolithic and early historical periods furnish greater varieties of pottery and objects made of metal, stone and stucco. The Material culture of the cities, towns and settlements excavated in Brahmagiri, Maski, Chandravalli, Sannati, Vadagam, Madhavanagar, Arachimedu Adich-annallur (Tinnevely district),

Porkalam in Kerala and Talakadu, more recently provide some examples of Terracotta human and animal figures, beads of different sizes and utilitarian objects modelled to the desirable shapes and functions.

2. Apart from the evidences of terracotta art from the archaeological sites, the rural and tribal artisans operated to fulfill the religious and functional needs of the people, they also looked forward to use their skill in creating special terracotta objects.
3. In the present scenario terracotta is regarded as one of the prospective handicrafts of India. Efforts were made to revive the terracotta heritage of each region and today the utilitarian and decorative pieces made of terracotta are produced in several centres and cater to the taste of elite.
4. Some of the contemporary artists have taken to terracotta as a viable medium for their creative expression.

#### Terracotta antiquity:

The oldest remains of Indian crafts that one can see and touch, belongs to the excavated areas. The figurines of remote antiquities can not be dated. These are identified as the symbol of fertility expressing vital energy. More sophisticated



forms have come arid gone, these simple hand-modelled, pinched to the required size, still hold world attention because of their unique charm and distinctive style. Very few terracotta figures survive to this date from excavated sites. Sannati one of the important site of Satavahana period in Andhra-Karnataka region have few representations of fertility cult. The figures are hand made by modelling the clay to the desired shape. They are expressive and decorated with necklaces and other jewels. Another group of images are profusely jewelled and a parrot is found perching on the right arm of the damsel. Lady with parrot in stone and metal later takes to innovative compositions. A tiny hamlet near Sannati known as Kumbaruru was the guild of potters and they supplied fine terracotta images to the Satavahana region. Even during the last century this place produced fine terracotta jugs, peacocks and other animals. Today this place is insignificant and the potters only supply the earthen pots to near-by villages.

Talakadu, a well known capital of Western Ganges is situated about 60 km. to Mysore on the left bank of the river Kaveri. The recent excavations have yielded a good number of terracotta antiquities. This excavation is significant as it provides a very good key to the chronology of human history at Talakadu. Pottery of finer variety in red, black, brown and fine polished have been brought out. A good number of different size terracotta beads and sprouts of big size jugs are found. Unfortunately not even a single human figure in full form

is found. The excavated objects include mutilated male and female figures, knobs, bulls and rams, a small round earthen tube, palm sized square, easy to handle blocks, wheels of toy cart, incense stick stand with six holes, many oil lamps of different sizes and shapes are discovered. In the 9th layer of the excavated trench a terracotta plank on the foundry floor was discovered. It is identified by the archeologists as a sitting plank, it is made of rough gritty clay but well baked. In the 8th layer a square tray with raised edges is found and it is identified as an votive tank. In the early historic culture of South India such votive offerings were commonly found. In the 9th layer of the trench a kiln is also found.

With the available few terracotta objects, it is possible to assume that the terracotta art existed with certain limitations in southern states. But the figurative representing deities or religious personages show fine modelling and delightful lines. They are non-Aryan with the features like short nose, thick lips, round oval shaped faces make us to think that the potter has apparently chosen people of his own stock in mind while moulding these figures. In historical times stone, metal, ivory, wood were the acceptable medias for the impressive kind of expression of the southern regions. Probably the reasons may be, the low quality material, the insignificant size and the fragile nature of terracottas are obvious defects of which they were hardly to be considered as the viable media for the strong appeal and the nature of permanency which the South



Indians looked for. Thus it was not considered here as the major form of art.

### Terracottas in tribal and folk traditions:

South India is a region so richly endowed with layer upon layer of beliefs and customs, it is no wonder the small villages and tribal centres are the repository of the early traditions as well as living energy. The potters still retain a respect for the divine origin of their craft. Everyday before the potter sets to work, his simple tools are given due veneration as gifts from god and prayers are offered for the hands to be guided by the lord. Almost all potters of the villages, are adept in producing both utilitarian objects and the figures of deities, toys, oil lamps for the annual cycle of festivals and religious ceremonies. The craftsman was the link between the monumental form of the great tradition, the rural gods and the tribal deities of forests and mountain. However, diverse the forms and distorted the images are the roots of the creative process lay in this artisan tradition. It was from this tradition that the great temples were built and the sculptures of Puranic gods found expression. It was the same tradition that produced the artefacts for the tribal and rural folk of this region. (Earthen Drum, Papul Jayalar p .17) The Nilgiri tribes are known for their terracotta human and animal figures. Even the lids of the pottery they modelled into figurative. One of the example from Govt. Museum Madras show the male human figure on a lid and a buffalo with an over emphasized horn raised naturally. Among these tribes, the figure of a buffalo represents male

fertility. These pottery figurines are fertility symbols on burial urns. Few more modelled figures such as a female bust, a lid surmounted by leopard. A howling dog figure is discovered from folklore museum, Mysore is of small size, may be a toy for the child. Another figure, a terracotta funerary urn from Government Museum Madras has an exaggerated body sarcophagus with head of a ram also comes from a tribal region of Tamilnadu.

The festivals of *Navaratri*, *Diwali*, *Makara Sankranti* and *Gramadevata* (deity of the village) are celebrated with great enthusiasm in all most all villages in South Indian states. The Chariot festivals of that region fall during these festivals. The craftsman from near-by villages bring traditional as well as innovative oil lamps, small size prototypes of the village deities, and varieties of toys to these festival markets. The villagers make it a point to buy new sets of terracotta objects in every season. This promotes and motivates village craftsman to survive on his art. The age old tradition of exhibiting the dolls in every household during the *Dassara* festival cultivated in the children and adults, a habit of collecting the dolls, Every year the new set of dolls are added to the collection. These dolls in early times were specially drawn from the rural areas. These festivals in South India created a sense of appreciation among the people for figurative arts. Every house will be like a small museum, having the collections of few terracotta items.



Ayanar, Sasta, Kesavanandana are all the mighty male gramadevatas the village deity of Tamilnadu, Kerala and Coorg respectively, 'They are considered as the legendary sons of Siva and Vishnu in his form as Mohini, who awakened the passion of Yogi Siva. The most famous of the southern terracottas of folk traditions are the votive offerings of animals particularly horses to Ayanar in Tamilnadu. While passing through the winding roads of rural belt of Tamil Nadu, one may see the Ayanar Shrines, particularly seized with amazement to encounter striking terracotta horses, known as 'Kudurai'. The shrines to Ayanar, the beautiful sea-coloured one, are open to the sky. The monumental forms of clay horses, bulls and elephants signify the holy sites. The animals, cast long shadows and create a field of mystery and defiance. The most ancient shrine is located in groves of trees near Namasamudram in Pudukottai. Thousands of terracotta animals are flanked through the path leading to this groove.

The villages of Pudukotai and Salem districts of Tamilnadu consider Ayanar as the guarding deity of the villages. The villagers think that Ayanar rides on the mighty terracotta horses (six meters high maximum) during the night through the fields and forests driving away the evil spirits. The appearance of the horses give a feeling that they are ever alert to move. During the harvest festivals the villagers thank Ayanar by offering the legendary heroes such as Veeran, Karappan and Karthavaryan etc. These figures are very

expressive with big mustaches and the potters take delight in distorting these figures. Sometimes a gigantic male figure known as Munnadiyars stand erect with raised hands is regarded and respected by the villagers as the formidable protector of the Ayanar shrine. In some shrines the several figures known as Kannimar, who are the virgins, worshipped at 'the time of drought.

The legs and the hollow bodies of horses, bulls and elephants and also of other deities and figures are rounded on the potters wheel, the heads are separately hand-moulded by the potter and later attached to the body. The figures are decorated with clay trimmings in the form of bells, stylised floral motifs, beads, *keertimukhas* (grotesque faces). If the commissioned figures are very big in size they are made on the spot. The gigantic figures are made in component parts, fired, assembled and fired again. The faces and sometimes even the body is also coloured in red and yellow. When everything is set in place, life is given to the figure through the painting of the eyes by the potter who acts himself as the priest. The occasion is marked by animal sacrifice. Unlike potters elsewhere in India, the makers of these horses and other votive figures are the *Kusavan*, are accorded an elevated status, tracing an ancestry to the union between *Brahman* and *Harijan* woman. Commissioned on an auspicious day to replace one or more of the every decaying effigies made by his predecessors, the potter is assisted by wife and children in making of the largest



votive offerings. (Arts and Crafts of India- Nicholas Barnad Page 167).

Kaliyamman and Mariyamman are the most worshipped female gramadevatas for warding off social evils in all parts of South India. In the place known as Mariyamman Koel in Tanjore district, at the annual festivals thousands of devotees offer minor gods and goddesses and animal figures of smaller sizes to Mariyamman. The craftsman looks forward for profits during these festivals. In northern part of Karnataka, in village Soundatti, a cult of Yellamma is widely known. The terracotta face signifies Yellamma who is a Jogi, a mandicant. The women carry these faces on their heads and walk the whole distance as a vow.

#### Terracotta handicrafts

The skilled hand of the Indian craftsman is one of our most important and yet most invisible resources. It is being perceived with concern and with a precise understanding of its values. Smt. Kamaladevi Chattopadhyaya and Mrs. Papul Jayakar awakened the interest in the heritage of Indian handicrafts with their efforts. The efforts of office of Commissioner for Handicrafts, many hesitant craftsman and talented needy persons were motivated to take up terracotta handicraft as their profession. The stylised ritualistic animals, human figures, and utility objects made in terracotta media are well appreciated in cities and towns. The Technical Wing of Research and Training, Govt. of India in handicrafts is situated in Bangalore. The centre provides training to develop tools,

sophisticated technology, design innovative products, resource mobilisation, identifying alternative raw materials. As such many NGOs have taken up the manufacturing, marketing of terracotta objects. The Regional Design centre of South India, situated in Bangalore organizes exhibitions, workshops, survey and other activities to promote this handicraft. Crafts Council of India and Dakshini in Chennai, Crafts Council of Karnataka are the other organizations supported by Govt. of India to promote the terracotta craft.

The traditional centres such as Kudike Bevu, near Bangalore where the whole village is of potters and at particular months of the year they prepare their special items such as terracotta bell and oil lamps. They are a closed community and very difficult to catch hold of them. Most of the time they go outside their village doing different kinds of odd jobs. Karigiri, a small village near Chennai is another traditional centre, but the potters are aware of the market and demand for their products. A dozen potter families engaged in producing glazed pottery and variety of utilitarian objects with Persian designs. The clay they use is so soft and plastic that highly intricate designs in various shapes can be easily thrown on the potters wheel, with beautiful cut-out or incised designs. The other centre which take keen interest in promoting terracotta items are Ramanagaram, Clay Creations Kengeri, Jogardoddi, Mruchakatika, all near Bangalore manufacture innovative terracotta crafts. Akar in Bangalore is specialised in terracotta



jewellery. Inlay techniques such as using white clay for highlighting purpose, etching design on the surface, coil, embossing on the smooth surface have been recently introduced in the terracotta. Mangalore tiles are famous for their quality, and in the postal Karnataka the tile factories provide employment for large number. The tiles produced near Raichur is different from Mangalore, they are used for wall purpose and coated with mica and white clay to get the shining. Kodangalluru in Kannanur district in Kerala is known for its decorative pottery. In Pondicherry a terracotta workshop is established. Along with the craftsmen the contemporary artists like Antony d'Costa work here. The students of fine arts colleges of south spend few weeks working in this workshop.

The Design Centre is helping these centres to come out with fine pieces for export purpose such as the Tulasivrin-davan, vases, containers, pot holders, pen stands, wall hangings, Ganesha images, stylised Ayanar horses in small sizes, the bulls and elephants, decorative tiles are some of the items that fascinate the people in their traditional and modern forms.

#### **Terracotta in Contemporary arts:**

The preparatory courses in Fine Arts Colleges train the students in clay modelling. This knowledge prompt them to work on the terracotta medium when they go for specialization in sculpture. The early stage of experimentation of form is always worked in this medium as the students are conscious of the cost factor of

other material. Terracotta has always been considered a poor man's sculpture, mainly because its raw material, which clay is available free or at a nominal cost. The budding sculptors enjoy the vocabulary in terracotta art which is direct, intuitive and simple. Transformation is the uniqueness in terracotta art. The spontaneous impulses of the artists are effectively translated into terracotta images.

The famous South Indian artists such as Nandagopal, Janakiraman, Dhanapal, Paranukutti, Vasudev today known for more permanent media had initially worked in terracotta. The veteran artist and the prolific writer in Indian contemporary art K.G. Subramaniam introduced the strength of appeal through terracotta murals. Motivated by his mural blocks many artists experimented innovative forms and designs giving a new dimension to terracotta art. Among the present artists John Devaraj makes hundreds of heads of different sizes and expressions and use them in performing media. N. Pushpamala's terracottas have made a special significance in contemporary world as she has chosen it as her media of expression. In the works of Pushpamala we find evidence of the trajectory of using the pliability of material and a sense of fragile existence. It can convey in a satirical witty mode which was earlier explored by K.G. Subramaniam. Her works enhance the scene of humour which however is tempered by a gentle empathy in her adolescent female figures, frequently suggestive of growing into adulthood.



(Indian Contemporary Art Vadhera Art of Gallery, Delhi P.56). C. Douglas from Choramandalam mainly works on paper using mixed media. Fascinated by the natural vibrance of texture and colour C. Douglas uses terracotta powder directly on his paintings which gives him the required tactile effect.

Indian Terracotta is a great field of study but largely overlooked and by passed. It is only recently that an appreciation for

terracotta art has come about. Today the South Indian sense of visual expression look at terracotta in terms of both craft and art. Art Museums, Craft Museums, the terracotta production centres, folklore museums and private collections are taking pride in preserving and promoting terracotta art. The creative works of unknown hands continue to stand as testimony for the indigenous aesthetic expression in terracotta art.

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# AYYĀNAR: A SURVEY AND CASE STUDY OF RITUAL TERRACOTTA HORSES GIVEN TO THE GOD AYYĀNAR IN CENTRAL TAMIL NADU

Stephen P. Huyler

Outside almost every village in Tamil Nadu stand horses that protect their communities from invasions of evil spirits. These sculptures - some are tall, their majestic forms rising to the sky; others are short with brightly painted bodies grouped like cavalry in the trees - symbolize the efforts of south-eastern Indian people to cope with their conditions: environmental, social, spiritual, and physical. More votive terracottas are sculpted and used today in this state than in any other part of India. Villagers take great pride in the style and beauty of the terracotta images they present to their gods. Many are elaborately decorated; some are the largest terracottas ever recorded. All are essential elements in the numerous rituals that encourage the continuity of Tamil traditions.

Although many cults and ceremonies in Tamil Nadu require the offering of terracottas, most are given to *Ayyanar*, the deity who guards the boundaries of Tamil communities.<sup>1</sup> Identified with *Harihara*, *Ayyanar* is the son of both *Śiva* and *Viṣṇu* (as *Mohinī*); as such, he is honoured by

both *Śaivites* and *Vaiṣṇavites*, adherents of the two major (and often opposing) Hindu sects. A story relates *Ayyanar's* unusual birth.<sup>2</sup> The ferocious demon *Mahiṣasuran* performed a severe penance to *Śiva* and then requested a special boon - that he, the demon, might be empowered to destroy anyone simply by placing his hand above that being's head. *Śiva* granted the boon-whereupon the demon vowed to test his new power upon *Śiva* himself and began to chase the god through the forest. *Śiva*, realizing that he had unwittingly granted a power that could indeed destroy himself, hid inside an unripe nim fruit. The demon, unable to find *Śiva*, changed himself into a gigantic goat and began to eat the entire forest. *Viṣṇu* became aware of *Śiva's* predicament and, realizing that the entire universe would dissolve if *Śiva* were destroyed, decided to intervene. *Viṣṇu* changed himself into *Mohinī*, the most beautiful and sensuous woman ever created, and called to the demon. *Mahiṣasuran* saw *Mohinī* and was overcome with passion for her. *Mohinī* told *Mahiṣasuran* that he could make love to her



only if he would wash his filthy body first. She sent him in all four directions looking for water, which he finally found in the north. While washing himself, he placed his own hand above his head and was destroyed immediately. *Viṣṇu*, back in his original form, went to the nim fruit in which *Śiva* was still hiding and tried to coax him out, telling him how he, *Viṣṇu*, had outwitted the demon. *Śiva*, still frightened, refused to emerge. *Viṣṇu* then transformed himself back into *Mohinī* to prove his story, and *Śiva*, peeking out of the nim fruit, was overcome by uncontrollable lust for the beautiful woman. In a fraction of a second, *Śiva* rose out of the fruit and embraced *Mohinī*, ejaculating prematurely. *Viṣṇu* as *Mohinī*, fearing the cataclysmic effect that *Śiva*'s sperm would have on all the worlds if it fell onto the ground, caught *Śiva*'s seed in his/her hand – and there gave birth to *Ayyānar*. Consequently, *Ayyānar* is truly the offspring of the two principal male Hindu deities.<sup>3</sup> Worship in his shrines – set apart from community centres and from major temples – unites the two Hindu sects and all castes in worship.

Each *Ayyānar* sanctuary, usually situated in trees and often near water, has as its focus a stucco or clay image of the god.<sup>4</sup> He is always depicted as proud and authoritative, seated in an attitude of dispensing justice.<sup>5</sup> The worship of *Ayyānar* is ancient in Tamil Nadu, probably derived from honouring a warrior-hero who was later deified similar to the cult of *Revanta* in North India.<sup>6</sup> *Ayyānar*, known also as

*Sāstha*, *Māsāttan*, or *Bhūtanātha*, is a folk deity with strong classical ties.<sup>7</sup> The earliest sculptures of *Ayyānar* date from the seventh century<sup>8</sup>, although it is possible that his identity emerged from the worship of *Iyen* or *Iya*, a hero mentioned in early Jain and Buddhist texts.<sup>9</sup> Each Tamil village, or group of villages, has its own shrine to *Ayyānar* (there are thousands of these shrines in the state), and although his role as protector of boundaries is constant, his title and specific function vary from community to community.<sup>10</sup> In many shrines, *Ayyānar* is depicted as flanked by his two consorts, *Pūrṇā* and *Puṣkalā* (also known as *Pūranī* and *Pūrselai*), who are believed to add both fire and tranquillity to his judgements.<sup>11</sup>

When properly beseeched, *Ayyānar* enlists the help of his spiritual soldiers, *Vīraṇ*, powerful warriors who battle the demons of disease, infertility, flood, drought and all natural and human calamities that might befall his devotees. Like that of many warriors, their anger and ferocity are feared.<sup>12</sup> According to local custom, *Ayyānar* should not be approached unaware by common man; his shrines are situated on the farthest edge of the community – not only so that the boundaries may be protected, but also that *Ayyānar*'s temper might not be provoked unwittingly and result in harm to nearby inhabitants. This god's potential wrath may be appeased only by contacting him through one of his *pujārīs*, who are never *Brāhmaṇ*.<sup>13</sup> His worship is believed by his devotees to be *adi-Brāhmaṇ*, predating the



*Vedic Brāhman* forms of ritual, and his priests come from many castes.<sup>14</sup> Most of the priests who serve *Ayyānar* and act as intermediaries between him and his supplicants are the potters who make the terracotta images that fill his sanctuaries.

*Kulalar* (potters) are well respected in Tamil Nadu and their products honoured. Although technically *Śūdra*, one of the 'inferior' castes, they are highly regarded in many communities. Their roles as priests for *Ayyānar* and other local deities – the intermediaries between man and his gods and the direct spokesmen for gods' instructions – gives them an indefinable power in Tamil villages. Over two hundred thousand *Kulalar* live and work in this state<sup>15</sup>, divided into several different sub-castes, among them the *Udayar* of the region surrounding Chidambaram, the *Velar* of the region of Madurai, and the *Pathar* of the region of Cuddalore. All believe they descend from the same ancestor, *Kulalamuni*, who received his gift of tools and technology and his position as creator of sacred and mundane vessels and sculptures directly from *Brahma*, who also provided this honour to be continued by all of *Kulalamuni*'s descendents.<sup>16</sup> As craftsmen, they transform sacred earth into objects of utility and divinity; as artists they act as conduits for divine power, invoking life into clay vessels and images; as priests they bridge that fearful chasm between the world of gods and men, bringing the gods' words and healing power to mankind.<sup>17</sup>

Each village has developed its own

rituals and customs to honour *Ayyānar*. In annual festivals throughout Tamil Nadu, terracotta horses are placed near *Ayyānar*'s image in the belief that his power transforms the clay into living mounts in the spirit world for his *Vīran*, who ride them in their nightly war against the forces of evil.<sup>18</sup> In some shrines, as many as a hundred such horses are given each year, added to the herds of previous years, while in others, an entire community may combine resources to commission one immense terracotta horse whose donation will benefit everyone.<sup>19</sup> These and other Tamil terracottas are intended to be ephemeral: the broken pieces generally are thrown onto heaps that contain the remains of centuries of votive rituals. As elsewhere in India, these terracottas may well be vestiges of ancient practices of animal sacrifices, and are in some cases the poor man's alternative, although the patronage required for the donation of a large terracotta horse could hardly be regarded as the result of economic restrictions. Animal sacrifices still take place in some *Ayyānar* shrines, however this practice has socio-religious overtones which usually relegate it to the province of backward classes'. *Brāhman*s and many modern educated Indians decry animal sacrifice, and many claim that it does not exist in Tamil Nadu.<sup>20</sup> However the results of this survey would prove otherwise. Sacrifices of chickens were documented in several *Ayyānar* shrines in South Arcot District.<sup>21</sup>

Many Tamils pray to *Ayyānar* for cures for sick or injured members of their



families. A common form of terracotta offering to *Ayyānar* is a *thottilam pillaiyam*, or cradle child. It represents a sick child, usually seated, sometimes in a wooden cradle suspended in a tree near the god's icon. The child's parents place it there at the moment when they first implore the god to aid them. If their request is fulfilled, they will donate a horse to *Ayyānar* during the next festival. Votive terracottas are also given to *Ayyānar* for a variety of other reasons – for example, to ensure a healthy crop, to bless a difficult journey, or to prevent an unhappy separation. Sculptures of dogs and cows are offered to guard the health of domestic animals. Clay insects and reptiles remind the god to protect his devotees' homes and crops from these pests, while terracotta fish may signal a fisherman's desire for a better catch. Human figures often represent primary donors to the shrine, or people who desire particular recognition in the community, such as newly weds who want to have their marriage blessed.<sup>22</sup>

Although terracottas today remain important to the lives of most Tamils, the livelihood of many Tamil potters is threatened by the decline in demand for their vessels, which are being replaced by such contemporary products as plastic buckets and aluminium pans.<sup>23</sup> Reduced sales, the lure of industrial jobs, and the rigidity of the traditional *jajmānī* system have combined to cause many sons of potters in Tamil Nadu (and elsewhere) to abandon their hereditary profession, resulting in a smaller output of pottery and

terracotta sculpture each year. That which remains, although still pivotal to the maintenance of indigenous culture, is beginning to change. Styles that once varied from village to village have begun to conform to a regional standard. Traditional designs increasingly incorporate elements of commercial art and influences from television and films. The sculptures of remote villages have begun to reflect concepts of the modern world – a world in which Indian terracotta production is gradually gaining popularity.<sup>24</sup> Terracotta exhibitions, festivals, and symposia in Indian urban centres as well as abroad draw rural craftsmen in increasing numbers.<sup>25</sup> While this commercial trend encourages national pride in craft traditions and bolsters the craft economy, it also threatens to cause a further standardization of styles and techniques. As a result, numerous "terracotta centres" have been established for the mass production of exportable terracottas. These sculptures now tend to be treated as durable works of art rather than as the ephemeral embodiments of Divine Spirit.

Palaniappan, a rural Tamil potter, exemplifies this contemporary change. Twelve years ago, under the sponsorship of the All India Handicraft Board, a Central Government organization of craft patronage, he travelled to Bangalore, capital of Karnataka, to study improved techniques for terracotta production and firing. The results of his education are evident in his work: Unlike most Tamil sculptors, he uses a permanent brick updraught kiln to fire



his sculptures at higher, uniform temperatures with more durable results, and their sculptural style is a subtle blend of his heritage and that of other states. In an average year, he sculpts on commission (among other figures) thirty large horses, each composed of eight separately fired modular elements. Descended from many generations of potter-priests, Palaniappan continues the tradition of being an intermediary with the gods, placing the horses in *Ayyānar's* shrines and facilitating communication between supplicants and deity; but commercial demands for his products and for demonstrations of his craft techniques have profoundly influenced his life. In response to a new vogue for museum exhibits of working craftsmen, Palaniappan has travelled to Madras, Delhi, Calcutta, Bombay, and other Indian cities. He also exhibited in London in 1982; Washington, D.C., in 1985; the Soviet Union, and Japan, in 1987; and Syracuse, New York, in 1990.<sup>26</sup> This extensive exposure to other cultures and craftsmen has altered the style and substance of his sculptures.<sup>27</sup> For example, in India each terracotta would be brightly painted to proclaim its presence to the gods, but Western aesthetics have dictated that these sculptures be left unpainted. When Palaniappan returns to his remote village in Coimbatore District, Tamil Nadu, he brings innovations, adaptations to a modern world that is beginning to affect the production and purpose of all Indian votive terracottas.

Having established a general identi-

fication of *Ayyānar* and his worship in Tamil Nadu and a brief survey of the terracottas used in rituals dedicated to him, the remainder of this chapter focuses upon a case study of a previously unrecognized potter in a remote Tamil village. Until he died in 1983, Vaithyalinga Pathar lived in the small village of Gudithangichavadi in South Arcot District, 209 kilometres south of Madras.<sup>28</sup> When interviewed, he was in his early seventies. Married at twenty-five to a girl of sixteen, who was later known simply as Amma (Mother)<sup>29</sup>, the couple had three children - two sons and a daughter - two of whom had died by the time of these interviews. The remaining son lived 129 kilometres away and worked not in his hereditary role as a potter but rather as a lineman for the telephone company. Five persons now lived together (Vaithyalinga and Amma, their daughter-in-law, and her two sons) in a large brick and mud family dwelling with a tile roof supported by teak pillars and cross-beams. On either side, in terraced houses which had originally been part of the same ancestral dwelling, lived the families of Vaithyalinga's two deceased brothers.<sup>30</sup> Until ten years earlier, all three brothers had been engaged regularly in pottery-making and sculpting. Now Jagadesan, the nineteen-year-old son of Vaithyalinga's niece (the eldest daughter of his elder brother), was the only other male carrying on the trade. He had not yet learned to sculpt, but his mother, Rajambal, occasionally helped Vaithyalinga in this craft. Gudithangi-chavadi had a population of 1872, mostly farmers and factory workers - no upper-caste *Brāhmans* or *Kṣatriyas*.



The only other craftsmen were two carpenters and a blacksmith/wheelwright. Vaithyalinga's father and both grandfathers had been potters. "There is not a time when my family were not potters," he said. "We have lived in this house for three hundred years, but before that time my ancestors lived in Chidambaram." Amma's father had been a weaver, but one of her grandfathers had been a potter. (Both of Vaithyalinga's sisters married weavers.) Although he learned his trade from his father and his uncles at an early age, Vaithyalinga did not begin working as a potter until he was forty. Before then, he farmed family lands – which, at that time, were more extensive. A series of financial disasters had forced him to sell all but one-half acre of his farmlands, but farming that remaining land was still essential for his family's livelihood.<sup>31</sup> Vaithyalinga spent two to three years in his apprenticeship, but he said it took him ten years working alongside his brothers to learn his trade fully.

Vaithyalinga's potting wheel always stood on the front verandah of the house at the edge of the street.<sup>32</sup> An open area behind the house contained his mound of raw clay, stacks of fuel, and drying vessels and sculptures; this was also where his temporary kilns were built. The house contained two small bedrooms at the front, a very large central room in which much of the family's indoor activity occurred, a kitchen, and a storage room. Pots were stacked in every available space: in corners under beds, alongside pillars. In the centre

of the main wall of the large room was a niche enclosed by wooden doors – the *koil viṭu*, or house shrine. Inside the shrine were brass images of the family deities, *Śivaliṅga*, *Śivakāmi Amman*, *Murugan*, and *Gaṇeśa* – all surrounded by posters of the gods and framed photographs of the family *guru*, Vaithyalinga's parents, and his dead son. He commented, "I start my day's work after my regular meditation. Our family deity is *Śivakāmi Amman*. During the Tamil month of *Thai* [January-February] we celebrate the special *pūjā* [worship] for her by offering *mavilakku* [a lamp made of flour mixed with brown sugar and containing a lighted wick burning in clarified butter]. We also conduct the *Karagam* festival along with this *pūjā*. *Karagam* consists of devotees dancing with decorated pots on their heads and many garlands on them." Once each year, Vaithyalinga walked barefoot and unharmed across the red hot embers of a *pūkkuli* (coal pit) to prove the strength of his devotion to his gods<sup>33</sup>, while on three special occasions (*Pōṇgal*, *Saraswati Pūjā*, and *Navarātri*), he led his family in ceremonies to worship and honour their potting and sculpting tools.<sup>34</sup>

Vaithyalinga's activities were divided among throwing pots, sculpting, firing, farming, and devotional and priestly duties. Pottery-making was his main occupation, although, as he said, "Due to the advent of other utensils made in plastic, German silver, etcetera, the demand for pottery has decreased over the years." With the help of his family, he usually managed only two



kiln firings of pottery each month, with a capacity each time of one hundred fifty to three hundred pieces. Half of the pots from each firing were given as part of the *jajmānī* system to other villagers in exchange for food or necessary craft products; for example, at the time of a local wedding, Vaithyalinga was expected to supply the family with thirty-two different types of pots.<sup>35</sup> His niece, Rajambal, took the rest of the kiln products to sell in the weekly market. She remarked, "Every time the kiln is opened we take one-half of the quantity for sale. This is because we are not supposed to take the entire quantity without cash payment." At the time of these interviews, a pot measuring 150 by 200 mm (6 by 8 inches) sold for twenty paise (1.2 pence or 2 cents); one 200 by 250 mm (8 by 10 inches) sold for twenty-five paise (1.5 pence or 2.5 cents); and a large one 460 by 460 mm (18 by 18 inches) sold for fifty paise (3 pence or 5 cents). Terracotta sculptures, on the other hand, generally were produced only on commission. A horse 460 mm (18 inches) high sold for twenty rupees (£1/20p or \$2), while one 790 mm (31 inches) high sold for thirty rupees (£1/80p or \$3). In order to supplement the family's meagre income, Vaithyalinga's daughter-in-law made and sold *iddlies* and *dosais* (rice-flour cakes). In 1980, the combined average monthly income for the entire family was one hundred fifty rupees (£8/85p or \$15).<sup>36</sup> Vaithyalinga commented, "If the intake is good, we certainly find satisfaction in our work. If the business is not good, we find it difficult to repay our loans. Usually our

business is very dull during the rainy season. During the rest of the year, our business will be better. The demand starts to pick up in the month of *Thai*. In spite of all the hardships we face, we stick to this industry, as we cannot switch over to any other line." Vaithyalinga's income was also supplemented by the seasonal farming of rice, sugarcane, *ragi* (an edible red grain), and vegetables – and as often as possible by money sent by his son. In addition, he received food, cloth, and occasional money for his services as *vāltiyār* (priest) to local shrines.<sup>37</sup> Strict vegetarians, the family subsisted primarily on rice and *iddlies* topped by *rasam*, *sambar*, and other simple, highly spiced vegetable curries.<sup>38</sup>

The demand for terracotta sculpture was sporadic and seasonal: Most sculptures in Tamil Nadu are given to the gods during festivals in the spring and summer. A local villager who wished to beseech *Ayyānar* for a specific boon would come to Vaithyalinga to request his intercession. Together they would visit *Ayyānar's* shrine at the edge of the village, where Vaithyalinga would conduct the *pūjā* and both would pray to the god. The potter regularly officiated at and supplied terracottas to six different *Ayyānar* shrines in his vicinity, although some of the shrines only required his services once or twice a year.<sup>39</sup> Vaithyalinga said, "We worship *Ayyānar* by offering milk, curd [yoghurt], *ginguli* oil, peanut oil, bathi, camphor oil, sandalwood powder, dried coconut, green coconut, and five varieties of available fruits. The image of *Ayyānar* is given *abhiśekhan* [a ceremonial



bath] and finally the camphor is lighted and the *aradhana* [supplication] done." Vaithyalinga might instruct the devotee to place in the shrine a terracotta gift as well, perhaps a *thoṭṭilam pillaiyam*, which he would provide. In his village, six or eight of these cradle children were given to *Ayyānar* every year. He said, "Orders for *thoṭṭilam Pillaiyam* are given to me by *Ayyānar* devotees for offering to *Ayyānar* for the well-being of anyone in their family." If the worshipper's wish were granted, then he would be expected to present the god with a *kūthukūthurai* (terracotta horse for *Vīran*) during *Ayyānar*'s annual summer festival.

Once a year, Vaithyalinga and other family members would excavate four cartloads of clay from a pit one kilometre away and deposit it in a mound behind the house.<sup>40</sup> The process of sculpting, firing, and decorating a *kūthukūthurai* horse would take anywhere from two weeks to a month, depending upon climatic conditions and the potter's other workload. A description of the production of a typical terracotta horse follows.<sup>41</sup>

Vaithyalinga explained, "Before starting work, I do a small *pūjā* to Lord Murugan and meditate for about ten minutes every morning." He would first light a stick of *agarbatti* (incense), close his eyes for a few seconds' meditation, and *pranam* to the clay and to his tools. To create the resilient consistency needed to support the figure, the potter mixed water with one part rice husks and three parts clay, aided by Amma, who brought him the

chaff.<sup>42</sup> He said: "The consistency should be soft and pasty; but at the same time, it should be strong enough to support the shape of the figure being sculpted." After kneading the clay to remove stones, sticks, any irregularities, and all air bubbles, he moulded on the ground four 300 mm (12 inch) square slabs, each 10 mm (3/8 inch) thick. After allowing them to dry for a few hours, he wrapped each one successively around a 125 mm (5 inch) diameter *mavul kattai* (wooden dowel), first covering the dowel with ash to keep the clay from sticking. Then he joined the seams into a cylinder. After removing the dowel, he stood all four cylinders upright upon an ash-dusted wooden plank and let them dry. Because each new section had to be dry enough to support the next addition, the process of sculpting was slow. But Vaithyalinga never wasted time. When completing work on each stage of the horse, he would prepare clay, work on other sculptures, or throw vessels on his wheel. On the second day, he gradually added ropes or coils of clay to each cylinder to lengthen and widen their tops. By the third day, the upper circumference of each leg was wide enough to become the flanks of the horse. "I am now joining the rear legs. I have finished all the front and rear legs. I have to allow these to dry before I join all four together. It will take one hour to dry." To these legs more ropes of clay were added, flattened, and smoothed to build up the horse's body. Vaithyalinga explained, "For strengthening the upper portions of the legs, I am using a mallet (*pālikai*) and anvil (*tattukal*). I hold the anvil



inside with one hand and beat the clay against the stone with a mallet that I hold in the other hand. I have now joined the legs thereby forming part of the belly of the horse. I have left a hole about 50 mm [2 inches] in diameter at the centre of the belly portion for the purpose of proper heating of the inside in the kiln."

By the fourth day, the sides were strong enough to allow the back to be bridged over and the neck to be constructed slowly. In any large hollow clay sculpture, proper drying is critical to tensile strength in order to prevent the collapse of unsupported sections. Vaithyalinga had decided to sculpt this horse with *Vīran* riding on its back. The choice of whether or not to depict the *kūthukūthurai* with a rider is decided between the sculptor and his patron. He commented, "To place the horse at the *Ayyānar* shrine with or without the rider depends upon the wishes of the devotee. Also devotees strongly believe that *Vīran* goes around the village on his horse protecting the village." Vaithyalinga regularly employed both styles. On the fifth day, while waiting for the existing sculpture to be sufficiently dry, he began to add *Vīran*'s bent legs and the first of several *mālās* (garlands) to the horse's neck, aided in this process by his niece, Rajambal.<sup>43</sup> The sixth day saw the formation of the rider's trunk up to his middle torso and the beginning of the top portion of the horse's neck. The potter said, "There are no specific measurements. I do every figure as it shapes to my taste and I have only the overall height in my mind as the

guiding factor. For example now the clay that I had put on the trunk portion has become excessive and I am removing excess clay." During the seventh and eighth days, Vaithyalinga finished *Vīran*'s torso and the horse's neck and began to work on the most difficult step: the horse's head. Since the head dropped to an angle of about forty-five degrees from the front legs, it had to be supported temporarily with sticks until it had dried enough to carry its own weight. He added a slab of clay protruding from the horse's neck at a downward angle, placing sticks from the horse's chest to support this jaw, and then gingerly added ropes of clay to this slab in joined arches to create the nose and head. The process, painstakingly slow, required many adjustments. Vaithyalinga commented, "After I started learning to make figures, it took me four years to make them to my satisfaction." On the ninth day, for the first time he used materials other than the chaff-and-sand-strengthened clay. The horse's head was strong enough to begin adding the ears. He said, "I am now doing ears for the horse as the base portion where they attach is still damp. I am using straw to support them, wrapping clay around the straw to create ears." Next he began sculpting the rider's arms and head, constructing an interior armature of sticks to support the shoulders and arms and a core of straw for the head before he covered it all with a thick layer of clay. "With these sticks and straw," Vaithyalinga said, "the head will not become weak. As the clay becomes completely hard in the kiln, the head will remain strong. ... I am now



adding some fine sand to the clay. The added sand will help to avoid cracks in the final figure."

On the tenth day, he transformed the amorphous lump of clay at the top into the face of *Vīran*. This was the moment when the figure began to gain its character, to have a presence and the potter's pleasure in the sculpting process noticeably increased. When with his thumbs he gave the *Vīran* his eye indentations and nose, Vaithyalinga said, "My mind thinks, my eyes see, my hands perform. Sometimes when I don't get the exact shape, I set it right by adding or removing clay." He spent the next day finishing the eyes, mouth, and nostrils of the horse's head, intricately modelling a mane and more garlands, and crowning the head with an *Annapakṣi* (a small bird) between its ears. "*Annapakṣi* is only meant for decoration. We continue the line of the mane so that it flows into the tail portion of the *annapakṣi* and hence this bird lends to the beauty of the horse. Whether to sculpt the *annapakṣi* or not depends upon the person who makes the horse." For this finishwork he used a finer clay taken from a river-bed and mixed with well-sifted rice chaff. On the twelfth and final day of sculpting, Vaithyalinga added details to *Vīran's* head and torso (a large moustache, an elaborate helmet with ear decorations, and epaulets, bracelets, and necklaces), completing the image of a ferocious equestrian soldier. He remarked, "I am now working on *Vīran's* eyes. For shaping the eyeball I am using the open end of a bottle. I am now working on the

eyes of the *annapakṣi*. As I am finishing the work on the bird's eyes, the horse and rider will be ready for placing in the kiln." On the thirteenth day, the elaborate sculpture was left alone to dry before its final day of firing.

Traditional potters in Tamil Nadu employ only temporary kilns; the permanent types used farther north were never popular here<sup>44</sup> In preparation for firing his sculpture of the *Vīran*, on the fourteenth day Vaithyalinga spread out various fuels on the ground behind his house. With them and the horse were all the other items to be fired that day: forty-five pots, six clay stoves, approximately seventy *avut* (clay cones to hold fireworks for the upcoming *Therukūthu* festival), a sculpture of *Ayyānar*, and one of a *thoṭṭilam pillaiyam*. The potter commented, "This morning I collected dried coconut shells, palm leaves, straw, sticks, casuarina wood, and cow dung cakes and prepared the ground for the kiln. After putting in the *Ayyānar* figure, the *thoṭṭilam pillaiyam*, the *kūthukūthurai*, and a few other items, I made arrangements for lighting up the kiln (*cūlai*)." Assisting in the process of preparing the kiln were Amma, their daughter-in-law, Rajambal, and seven other neighbourhood women. Amma spent several hours that morning standing barefoot in a small backyard mudhole, adding water, kneading the mud with her feet, and stooping down to pick out any unwanted pebbles and sticks. Meanwhile, after the figures were warmed in the sun most of the morning, they were placed



slightly apart from each other on a flat, clean area. A small dung fire was started nearby. At 12:31 p.m., the coals from this fire were divided, put into several unfired pots, and set by the women around and between the figures. Vaithyalinga then quickly added some coconut husks and sticks before he, Rajambal, and the other women (except for Amma) began to arrange the remaining pots upside-down between, against, and around the figures, carefully and gradually building them up into a rough dome. All the spaces between these pots and the sculptures were filled rapidly with more coconut husks, sticks, cow dung, and the clay firework cones. Next the entire dome was layered quickly: first with palm leaves, then with straw, and finally with a smooth layer of mud. The mud layer required impressive teamwork: The neighbourhood women relayed pots filled with mud in a brigade stretched between Amma, still in the mudhole, and Vaithyalinga at the kiln. In completing the kiln, the potter provided sufficient ventilation by leaving, in the centre of the dome, a hole 380 mm (15 inches) in diameter and, at the base, an uncovered ring of straw 230 mm (9 inches) high. (Vaithyalinga only fires oxidized pottery and sculpture; he never employs reduction firing.) Then, at 12:50 p.m., he lighted the kiln at both of these spots, saying, "Even if the weather becomes cloudy after lighting the kiln, no harm shall be done; but if it rains, the whole affair will be a total loss. Everything inside will go to pieces." At 1:15 p.m., he quickly wove palm leaves together to make an improvised screen in order to

block the southern wind. As cracks began to appear on the south side of the kiln, he added more mud and palm leaves to that section.

Five days earlier, it had rained, but this time the firing was successful. At 3:10 p.m., Vaithyalinga carefully began to pull off the dried mud layer: "What I am using is an iron rod. I am removing the mud to allow sufficient air passage for proper burning of the kiln." After a few more minutes, he said, "I am now opening the kiln quickly as the heat is rather too much and this might spoil the horse figure and others." Gingerly reaching into the kiln with an iron-tipped rod, Vaithyalinga lifted out the top pots and placed them to one side of the kiln. The removal process was slow in order to prevent a quick rush of cool air from cracking the red-hot terracottas. As the potter transferred the fired pots to the ground, Amma and Rajambal tested them by striking each one with a fingernail and listening to its resonance. (A cracked vessel would not resonate.) Gradually *Viran's* head, shoulders, and torso, and the head of his horse emerged intact – now red, rather than the previously unfired grey. At 3:40 p.m., Vaithyalinga removed the last of the pots around the horse's feet and the two smaller figures. The entire firing had taken less than three hours.

The terracotta horse and the other sculptures were kept inside the potter's house until such time as they were needed for donation to a shrine. A commission for a horse usually would be received at least a month or two before the festival for



which it was needed. If a horse was required for a shrine in another village, a messenger would be sent to Vaithyalinga's house with the order, accompanied by a small gift of food and clothing. In an average year, Vaithyalinga was commissioned to sculpt six to eight of these horses. The potter commented, "The demand for *Ayyānar* horses has increased over the years. Every year during the festival season for the *Ayyānar* shrine (June-July) we sell a larger number of *Ayyānar* horses." The demand for Vaithyalinga's terracotta sculptures was not typical of other potters in the district. A. Subramaniya Pathar, a potter of Panruti, a large nearby town, remarked, "The demand has reduced considerably over the years. Ten years ago, worshipping was more intense and, consequently, more devotees were offering horse images. In those days I used to sell fifty horses each year. Now I sell thirty horses per year."

The figure that Vaithyalinga had just completed stood 860 mm (34 inches) high, an average size for one of his horses. Stating that the largest terracotta he had ever made was approximately 1.8 metres (6 feet) high, he added, "The demand for quality of work has certainly come down when compared to my grandfather's days. The customers do not attach that much importance to the quality of work as in earlier years. Interest in art has come down." On another occasion he said, As these terracotta figures are mainly meant for offering to *Ayyānar* shrines by the devotees, not much importance is placed upon quality. Whatever I create is

accepted." This change in attitude and demand certainly was evident in the two huge terracotta horses and single elephant still standing in the *Ayyānar* shrine in Semakottai, approximately forty kilometres away. Superbly sculpted by Vaithyalinga's great-grandfather some-time in the late nineteenth century, they tower more than five metres (16 feet) high.<sup>45</sup> Each sculpture was constructed in a manner similar to that of Vaithyalinga's smaller horse. Large slabs and coils of clay were first shaped by hand and then beaten with mallet and anvil into walls 75 to 150 mm (3 to 6 inches) thick. After the elaborate decorative details were added, each of these gigantic hollow vehicles for *Vīran* was fired in a temporary kiln erected around it on the site where it still stands. Vaithyalinga commented that neither he nor his brothers had been taught to sculpt such large figures, and he was unaware of any potter capable of the feat. Although a few Tamil potters still continue to produce monumental terracotta horses upon rare commissions<sup>46</sup>, they appear incapable of sculpting figures as large as those standing in Semakottai.<sup>47</sup>

Throughout the year, Tamil Nadu has many festivals in which votive terracotta sculptures are given in worship. In South Arcot District, the two deities that most frequently require these gifts are *Ayyānar* and *Māriamman*<sup>48</sup>. *Therukūthu*, the primary festival focussed on the worship of *Ayyānar*, may take place any time in the summer months between *Parguni* and *Ani* (mid-March to mid-July).<sup>49</sup> The dates are fixed each year in consultation with priests,



astrologers, and village elders.<sup>50</sup> Itinerant troupes of actors and musicians vie with each other for the honour of performing during *Therukūthu*. Ten days are filled with raucous and colourful musical dance-dramas of popular legends, particularly the *Mahābhārata* and stories of *Ayyānar* and his *Viran*. Towns and villages are filled with special carnivals and markets, everyone dresses in their finest clothes, and all take part in the celebrations.<sup>51</sup>

*Therukūthu* is an especially important occasion for the *vāttiṭiṭār*, or potter-priest. Vaithyalinga Pathar was the *vāttiṭiṭār* for his village of Gudithangichavadi and for several nearby villages. A neighbour remarked, "In this village only this Pathar and Jagadesan Pathar [his grand-nephew] make pottery. In spite of their profession and their placement in society, these two families enjoy a certain amount of respectability in the village. Vaithyalinga Pathar, who has studied such Tamil classics as *Kamba Rāmāyaṇa* and the *Mahābhārata*, is considered a scholarly person. People in the village consult him on various matters pertaining to dreams, bad omens, ill health, domestic problems, village life, and so on. He and his wife are invited for all weddings in the village and they participate in all the social functions and festivals."<sup>52</sup>

Vaithyalinga began to prepare himself days in advance of each festival in which he acted as *vāttiṭiṭār*.<sup>53</sup> He slept on the floor (rather than, as usual, upon a bed) and alternated fasting with eating only selected 'pure' foods. He bathed twice each day, dressed in clean, unstitched clothes, and,

avoiding the women in his family, spent as much time as possible by himself praying and meditating.<sup>54</sup> Just before the *Therukūthu* festival, he would paint the images to be presented to *Ayyānar*. The choice of colours was left to the votary, but, unlike many Tamil potters, Vaithyalinga preferred a simple palette. He commented, I can paint my figures in any way you wish. If you like I will use bright oil paints. Some of my customers prefer this. It is considered more modern. I prefer to use the colours which I learned from my father and brothers. They are not so bright and they wear off in time." Designated sculptures (horses, cradle children, donor figures, and/or cow or dog figures, depending upon the demand) would be covered first with a slip of plain white lime. After allowing that coat to dry, he painted the figure's prominent features in the requested colours (red, blue, green, yellow, and black), using powdered, water-based paints purchased from the market and mixed with egg white, oil, and tree sap. The eyes were left to be finished later.

All night before the last day of the festival, Vaithyalinga would stay awake in solitary prayer. Early the next afternoon, the participating devotees would arrive at his house carrying offerings of flowers, food, oils, incense, and cloth to be given to the god. Vaithyalinga, dressed only in a white cotton *dhoti* (a long, wide cloth wrapped around the waist), with the *triśūla* insignia of *Śiva* marked on his forehead with white ashes, would carry the images out of his house and place them at the edge



of the street in a temporary shrine constructed of sugarcane stalks and banana leaves. There, accompanied by the loud adulations of a crowd of spectators, he would paint the eyes (*kantilappu*) of each of the sculptures, invoking *Ayyānar* to imbue them with his spirit and bring them to life. Regarding this auspicious moment, Vaithyalinga said, "This is most important, the painting of the eyes. Now the figure can be said to have life. Now it is a proper vehicle for the *Viran*. Before this time it was simply a figure. It had no importance. Now it is a fitting gift for the gods."<sup>55</sup> On behalf of the devotees, Vaithyalinga then dressed each sculpture with new cloth, adorned it with flowers and *sindūr*, and presented it with gifts of fruit and lighted incense. After this ceremony, he placed the smaller images in baskets cushioned with straw. Bamboo palanquins supported each horse, and all were hoisted onto devotees' heads and shoulders. Moving in procession through the crowded streets, the participants were led by the festival musicians and dancers and by Vaithyalinga. As in most Indian festivals, the noise was extreme: The singing and shouting of the participants was mingled with Tamil *bhajanais* (prayers) blasted from loudspeakers, while fireworks boomed intermittently. As the parade followed the route to *Ayyānar's* shrine at the edge of the village, ecstatic villagers reached towards the carried figures and to Vaithyalinga for blessing.

Freshly cleaned and painted with bright polychrome enamels, a huge stucco image of *Ayyānar* was seated in his shrine

with his right hand raising an iron sword and his right leg crossed over his left. Surrounded by trees and guarding the rice paddies and fields of sugarcane that formed the boundaries of the village, the sculpture was intended to command respect.<sup>56</sup>

Lined up before the trees behind the image were the broken remains of the terracotta gifts of previous years, and a large dirt pile composed of a jumble of heads and body parts of horses, gods, *Viran*, *thoṭṭilam pillaiyam*, guardian figures, dogs, and countless other bits, all remnants of centuries of devotion. When the procession arrived at the shrine, the new terracottas were unloaded from the baskets and palanquins and, under Vaithyalinga's direction, placed before the god. All the gifts that had been carried from the village were now put upon *Ayyānar's* lap. In prayer to the god, Vaithyalinga sang out:

"You have given us a life, you have  
shown us your mercy;  
We bring to you our gift,  
For the life you have given, we give  
you this horse;  
We are given earth; we are of earth;  
we return earth;  
Accept our gift".<sup>57</sup>

Reciting *sanskrit s'lokas*, the potter-priest lighted lamps and incense and distributed *vibhūti* (sacred ash) to the worshippers. *Ayyānar*, the bestower of miracles, was praised; his many deeds recited, his generosity lauded. Children who had been cured of illness were held up in proclamation of the god's great power.



Those votaries whose prayers had been answered told the stories of their miracles, and people who were cured of diseases or infirmities proclaimed their good fortune. The ceremony fulfilled their vows to the god, a sacred bond between an individual and his or her deity, the reciprocal exchange of gifts. New requests and supplications, written-on slips of paper, were impaled upon the iron sword. Then, in a tremulous trance, his speaking voice altered, Vaithyalinga, as *vāttiyār*, was possessed by the spirit of *Ayyānar*. Devotees competed with each other to press their questions to him, and Vaithyalinga, on behalf of the god, answered them. Advice was requested on family matters, civil disputes, health issues, and agricultural problems. *Ayyānar's* devotees believe that the god can see into their souls. He is considered just, but not benevolent, and some of the judgements that he passed through the potter demanded strict and arduous compliance.<sup>58</sup> Then, after an hour of speaking for the god, Vaithyalinga came out of his trance and the festival was over. Gathering, as his due, a portion of the fruits, grains, oils, ghi, confections, cloth, and money that had been given in offering,

Vaithyalinga Pathar returned to his home. After eating and resting, he began again his daily production of clay vessels, resuming his life as a craftsman of mundane terracottas until he was required again to serve as a medium for the gods.

After the festival, the shrine at the edge of the village was deserted. Passersby might stop before the image of *Ayyānar* from time to time to light a stick of *agarbatti* and leave a garland of marigolds, reminders to the god of their vows, his promises, or their gratitude. Generally the shrine would be left until the next summer's *Therukūthu* festival, when again it would be the focus of joy, hope and fear. The *kūthukūthurai* horses given to *Ayyānar's* *Vīran* had already transmigrated into the spirit world; the clay shells left behind were memories of devotion. Their freshly painted surfaces would rapidly begin to fade in the summer rains, as slowly they cracked and disintegrated to join the melding layers of their countless predecessors. Their life was in the giving, the culmination of vows; once given, they returned to the earth from which they were made, to be replaced by the next year's gifts of earth.



## REFERENCES

- 1 *Ayyānar* has been the subject of many short articles and small sections of books; but aside from a few pages in Stella Kramrisch's *Unknown India: Ritual Art in Tribe and Village* [pp 56-57], nothing of any note has, ever been published. The only detailed research on Tamil potters is the published works of Stephen Inglis derived from his unpublished thesis for the University of British Columbia entitled *Creators and Consecrators : A Potter Community of South Asia* (1984). His research is based upon documentation of a subcaste of potters, the *Pantiya Velar*, of Arappalaiyyam, a village suburb of Madurai, and is focussed upon their ritual roles. The *Velar* sculpt images and serve the shrines of many different deities, and the god *Ayyānar* is discussed in his thesis only on pp 253-254 & 282-283. Although Inglis' works have been invaluable in the writing of this thesis, at the time in which the bulk of this field research was conducted, it was not yet available. The material for Chapter Five is comprised of surveys of *Ayyānar* shrines and interviews of potters throughout Tamil Nadu, with special attention given to South Arcot District, and upon a potter of the *Pathar* subcaste. The surveys were conducted in 1971-72, 1980, 1981, 1982, 1983, and 1988, and were greatly aided by translations by Śiva Kumar and Srinivasan, both of Madras.
- 2 As told to the author by E. Dhanakodi, a priest in the *Ayyānar* shrine at Vadakalpattu, near Cuddalore, South Arcot District, Tamil Nadu. It is quite likely that this popular story is a form of "Sanskritisation" originally intended to legitimize a local, possibly pre-Aryan, deity by giving him classical ancestry.
- 3 Many other versions exist of this legend. Kramrisch [*Unknown India: Ritual Art in Tribe and Village*, p. 56] stated : *Ayyānar*, the Lord, is the son of the two great Hindu gods - Śiva, the ascetic Creator-Destroyer; and Viṣṇu, the Preserver. In order to arouse Śiva, Viṣṇu assumed the shape of a wonderfully beautiful girl called *Mohinī*, or Delusion. She excited Śiva, and he let his seed fall near the waters. From it, *Ayyānar*, the son of Śiva and Viṣṇu (*Hariharaputra*) was born. A king, while hunting, found the beautiful babe lying on the ground, crying but his face radiant with a thousand suns. "Commenting further, Nanditha Krishna [p 63] wrote: "*Ayyanar* has been identified with *Hariharaputra* in some of the larger villages and towns. *Hariharaputra* is the son of the divine union of *Siva* or *Hara* and *Visnu* or *Hari* when he took the form of *Mohinī*. Their son, *Hariharaputra*, is also known as *Shastha* and is associated with animals, of whom he is the protector. *Ayyānar*'s association with animals probably suggested this connection and thus facilitated his absorption into Hinduism. "Priya Devi [p 84] wrote : " In south India, where the *Saiva* and *Vaisnava* sects have their traditional stronghold, *Ayyanar* is the 'Hari-Hara Putra i.e. the son of Śiva and Viṣṇu (when he took the form of *Mohini*, the Enchantress.) It is perhaps because of this that he is known as 'Dharma-shasta' or simply 'Shasta' : 'He before whom laws cease'. " And Jayakar [p 222] also stated: "*Ayyānar*, *Sāsta*, Śiva, *Keśavanandana*, the chief of the *Bhūtas*, the mighty male *Gṛāma Devatā* of Tamil Nadu, Kerala and Coorg, is the son of Śiva and Viṣṇu in his form as *Mohinī*, the Enchantress who, to save the world from the demons, awakened to passion the Great Yogī Śiva as he sat in meditation." See also, duBois, p 41.
- 4 Tamil Nadu is one of the few Indian states in which primary images of deities are sometimes sculpted of clay, although these images are still rare when compared to those composed of stone, bronze, or



stucco. Of the fifty-seven *Ayyānar* shrines documented for this thesis, terracotta images of *Ayyānar* were discovered in only six. Almost all images of the god are of stucco sculpted upon brick bases. Inglis [Creators and Consecrators, pp 222-223] comments on Tamil-terracotta images, although he refers herein to both primary images and those given as parts of votive offerings: "Very little has been written about the use and special role of earthen images in South Indian worship. Part of the reason for this may be that this tradition exists apart from, and in fact conflicts with, rules of image making prescribed in classical Indian texts which form the basis of most studies of Indian religion and ritual. Although clay has been considered one of the four main materials appropriate for shaping an image of a deity and has apparently been used for making images since the third millennium B.C. [Varma p 109], the worship of baked clay or terracotta images, which are by far the most common type in South India, is widely prohibited. In the *Akama* texts, for example, which have been important sources for understanding South Indian worship, 'a preference is clearly stated for unbaked images' ... Also reported is the injunction against making images of terracotta, 'except when the aim is destructive results' [Varma p 192]. Based on these common sources, the actual widespread use of baked clay images presents a fact which is, on the surface, difficult to reconcile with Hindu texts which refer to the use of images. ... It is not surprising that local traditions of image making would receive little notice in *Brahmanical* Hindu texts which undertake to prescribe ideal behaviour based in the function of great temples and the conduct of ritual by *Brahmans*. That there is a proclaimed prohibition against the use of baked clay images in these texts is perhaps the reflection of a tension between the *Brahmanical* norms of the worship, which emphasize images of permanent materials and those of local religious traditions in which earthen images are prominent. Whereas the stone or metal image of the *Brahmanical* temple accumulates potency as a focus of divine presence through continual use over decades, centuries and millennia, the earthen image begins its essential deterioration and destruction immediately after its use in a single festival. Images made of permanent materials become symbolic of the timelessness, detachment and omnipotence of the great deities in whose likeness they are modelled. The images modelled by the Velar (potter), constantly recycled with the seasons, are more suitable containers of the capricious and dangerous deities which determine the ebb and flow of everyday life."

5. Vaithyalinga Pathar, a potter from South Arcot District, commented: "*Ayyānar*'s face should bear a smile. It should not be laughing. *Ayyānar*'s face should also be serene and not fierce. Only the *Vīraṇ* images found in the *Ayyānar* shrine should appear fearful. As the *Ayyānar* is supposed to look after the welfare of the villagers and crops he should look serene."
6. According to Nagaswami [p. 49]: "One of the main forms of the classical deity which was considered a folk deity adored by hunters when they started on hunting expeditions, is called *Revanta*, said to be the son of *Surya*. He was often portrayed riding a horse, accompanied by dogs and hunters. From number of sculptures found in northern India, he seems to have been worshipped by large sections of hunters in the early historical period. It seems that this concept of *Revanta*, the God riding a horse, accompanied by dogs, has taken the shape of *Ayyān Mahasastha* popularly called *Aiyanar* in southern India." Nagaswami goes on to say that *Ayyānar*'s representation in many art forms, particularly in Kerala, confirms his identity as *Revanta*, and that *Revanta* is mentioned as one of the titles of *Śastha* in an early text from Kerala, the *Tantrasamuchaya*. Priya Devi [p 84] states: "The Tamil *Ayyānar* however is also known as '*Arya Putra*'. There are some fine early mediaeval bronzes



of him. And it is possible that the post-Vedic (sic) myth of *Revantara*, the hunter accompanied by his dog, son of the Sun and Dawn, married into local cults of the Viran. The *Vīran*: ancestral hero or 'brave' of local battle and/or cattle-raid frequently became the cityguardian like the famous 'Madurai-Vīran'. *Ayyānar* is the Night Rider accompanied by a dog and is guardian-deity of the village." See also Sharma *Iconography of Revanta*.

7. Kramrisch *Unknown India: Ritual Art in Tribe and Village*, p 57. *Sastha* is mentioned in an ancient Tamil text, the *Śilippadikaram*. [Nagaswami pp. 49-50] *Sastha*, from the root 'to guide'. The root for *Ayyānar* is 'Ayya', meaning 'gifts'.
8. *Ibid.* p 5.
9. Dr. Frederic Clothi, University of Pitzburg (personal discussion).
10. Inglis [p 250] points out that although there are thousands of temples dedicated to *Ayyānar* in Tamil Nadu, in each case he is considered to be the tutelary deity (ie. the *Ayyānar* of Nellikuppam, or the *Ayyānar* of Semakottai, referring to that specific village). Kramrisch [*Unknown India: Ritual Art in Tribe and Village*, p 56] states: "While he is the same everywhere, each time it is a different *Aiyanar* who is worshipped."
11. Nagaswami p 50.
12. The Stutley's [p 334] identify *Vīra* as a "'Hero, chief, leader'. An epithet applied to Vedic gods like *Indra* and the solar *Viṣṇu*, and later to the *Buddha* and the *Jaina Mahavira*; to any eminent *siddha* who has overcome 'all earthly impediments by *tapas* (austerity), and to any national or legendary hero. Those who died valiantly in battle were transported by *apsaras* in brilliant chariots to *Indra's* heaven, 'the haven of heroes' (*viragati*). *Vīra* is also applied to *Śiva*, the 'chief of heroes' (*vīreśvara*). Heroes were sometimes regarded as 'part' of a deity born on earth, or as a unified portion of certain divine powers." According to Jayakar [pp 193-194]: "*Vīra* ... is a word used for the ancestors, the valiant warriors killed in battle while protecting women, fields and cattle. It is also the word for the *Siddhas*, the enlightened ones, the alchemists, *Yogis* and magicians who were conquerors of body and mind. The *Vīra* cult has very ancient origins. The two rampant tigers protecting the Earth Mother, from whose womb plants sprout, and the two male cobras protecting the *Yogi*, pictured in the Indus Valley seals, are indicative of the archaic role of the *Vīras* and the *Kṣetrapalas*." Krishna [p. 61] wrote that *Ayyānar* "is regarded as the night watchman of the village which he is supposed to patrol every night, mounted on his ghostly steed. He is a figure of ferocity, with an enormous moustache, prominent teeth and a sword held in readiness. *Ayyānar* is the commander of the demon hosts, who protects the villagers from the evil demons. The evil demons may take the form of drought, disease, enemies or even disgruntled ghost of the dead. He has several *Veerans* - 'brave ones' - or generals to assist him in his nightly task." Kramrisch [*Unknown India: Ritual Art in Tribe and Village*, p. 57] commented: "The Lord, *Aiyanar*, the guardian of the land, has his generals and lieutenants. They are heroes (*Vīra*), that is they are the souls of those who died in battle. They are joined by the host of demons, foremost *Karuppan*, the Dark God, who is all that *Aiyanar* is not. He is the adversary to whom blood sacrifices are due. *Aiyanar* is worshipped with flowers and fruits. The dark power within *Aiyanar*, the Hunter, has been hypostatized into *Karuppan*, his alter ego, the demon as pro-



tector. Together they are worshipped by the officiating priest who also is the maker of their images. He is the village potter."

In South Arcot District, where most of the field research for this chapter took place, although *Ayyānar's* devotees admitted fear of *Ayyānar* and his *Vīran*, they denied any connection between *Ayyānar* and *Karuppan*, and claimed that *Ayyānar's* worship had nothing to do with this 'dark power'. Soldiers astride rearing and rampant horses, whose front hooves are resting upon the shoulders of an attendant groom, adorn the stone pillars of the *Minākṣi* temple in Madurai and the Srirangam temple. Called *Madurai Vīran* they represent a seventh century martyred Madurai hero who was consort of the goddess *Minākṣi*. In some villages he is attendant to the goddess *Mariamamma*, and both are worshipped with sacrifices of sheep, buffalos, and chickens. Occasionally the *Ayyānar's Vīran* are confused with *Madurai Vīran*, and sometimes the former are given the latter's pronounced shape, most often in stucco by modern sculptors.

13. Whitehead pp. 18, 30, & 33. Krishna [p 62] recorded that unlike other village deities, *Ayyānar's* priests are *Brāhman* because he is never offered animal sacrifices. Although this may be the case at an isolated shrine, this survey and all other published records indicate that this *Brāhman purohit* is an exception. Also animal sacrifices are made in *Ayyānar* shrines. Regarding *Ayyānar's* discordant nature, Inglis [*Creators and Consecrators*, pp 282-283] wrote: "*Aiyanar*, over whom the *Velar* exercise exclusive rights as priests in their areas of service, presents an image to outsiders which is 'contradictory' and 'problematic'. He is depicted as both a priest and a king, as either celibate or with two consorts, of classical birth but of local jurisdiction. *Aiyanar* is worshipped in separation from the other deities with whom he shares his temples yet is believed to ride with them to guard the village boundary."
14. Vaithyalinga Pathar, the potter-priest of South Arcot District upon whom most of this chapter is based, stated: "What need have we of *Brāhman's*? They do not serve our gods and have nothing to do with them. They have their own practices which are not as old as ours. They have come into this land and with them they bring their beliefs, but ours is a more ancient belief. Ours is the spirit of the land, of this place. Our gods are the true gods of Tamil Nadu, and we worship them as we were trained by our fathers and their fathers and their fathers' 'fathers'. It has always been like this." Referring to his thesis documentation of the *Velar*, potter-priests of Madurai District, Stephen Inglis [pp 278-281] wrote: "The *Velar* have virtually no contact with *Brahmans* on a daily basis and the priestly work of the two groups rarely overlaps, yet the *Velar* definition of their own role as priests for local rituals includes a lively internal debate with what are perceived as ideals of *Brahman* heredity, skill, and behaviour. This debate takes two different directions, often simultaneously. First, the *Velar* assert an inherent superiority to *Brahmans* by birth through the claim that the *Velar* are 'ati-Brahman' or 'original-Brahman'. In this way they claim to be 'true' 'Brahmans, superior in their role as priests, as opposed to those spurious priests who came later and usurped the title, *Brahman*', and many other privileges. ...Perhaps even more characteristic of the particular way in which the *Velar* conceive of their priesthood is however, the notion of a superiority over *Brahmans* not through order of birth, but through confrontation. The defeat of *Brahmans* by potters, according to this notion, is due to the superiority of the particular type of power which the potter brings to bear through his priesthood."



15. Inglis *Creators and Consecrators*, p 62. In his thesis, Inglis [ibid. pp 50-58] gives detailed references to Tamil potters made by early western travelers, civil service officers, and academics.
16. "The story of Kulalamuni, told in the *Kulala Purana* (section II, p. 70) indicates the source of the power of the *Velar* priesthood. *Kulalamani*, the first potter, had renounced the world and was meditating in order to receive a boon from the gods. When asked by *Brahma* why he was doing this, *Kulalamuni* replied that he had been abused by everyone and wished to secure the assistance and constant company of *Aiyanar* (Lord of local deities). *Brahma* granted the boon, telling *Kulalamuni* that *Aiyanar* would become his family deity, that potters would be the priests of *Aiyanar* and that the enemies of potters would be defeated. *Brahma* promised that the descendants of *Kulalamuni* would 'control and rule' [Inglis *Creators and Consecrators*, p 2801." Inglis goes on to relate other stories from the *Kulala Purana* in which the results of contests of power and prestige between *Brāhmans* and potters prove that potters are far superior. Corroborating this belief, Vaithyalinga Pathar stated: "I am the *pujārī*, *vāttiyaar* (priest), for Lord *Ayyānar*. I perform the *pujās* to him for all the village people who want his help. My brother (deceased) was also his *pujārī*, as was my father. This duty has been given to us from earliest time by *Brahma* himself. We do our duty as best as we can."
17. Referring to Tamil potters, Kramrisch [*Unknown India: Ritual Art in Tribe and Village*, p 58] wrote: "Himself potter and priest, he moulds the clay horses, impressing the clay with tensions experienced in shamanistic possession. The clay itself is taken from a ground of sacred fertility. It holds the *linga* of *Śhiva* and the seed from which *Aiyanar* has sprung. *Aiyanar*, the Lord, scion of the two great Hindu gods, King of Demons, synthesis of deity experienced on the many levels of India's religious structure, depends on the clay horses offered to him for this rides. Their power is vested in the soil from which they are made. It does not extend beyond the Tamil village and its autochthonous art."
18. In 1909, Thurston [p 192] wrote: "Horses made of clay, hollow and painted red and other colours, are set up in the fields to drive away demons, or in thanks giving for recovery from sickness or any piece of good luck. The villagers erect these horses in honour of the popular deity *Aiyanar*, the guardian of the fields, who is a renowned huntsman, and is believed ... (to visit) ... the village at night, to mount the horses, and ride down the demons." Recently Krishna commented further [p 63]: "The most interesting feature of the worship of *Ayyānar* is the offering of horses. The compound is filled with terracotta horses, up to 15 feet in height, elaborately comparisoned with harnesses of bells, mirrors and faces of *Kirtimukha* and *Makaras*. The horses are baked and painted in gay colours and stand in the open, awaiting their nightly journey. They are the offerings of villagers (generally the more well-to-do) in fulfillment of vows taken for the propitiation of material ends. The terracotta horse is a divine reflection of *Ayyānar's* powers to protect the village and ensure its welfare. Why offer a horse, an animal which is foreign to Tamil Nadu? The probable explanation is that the horse was reminiscent of the chieftains and kings who were the overlords and protectors of the villages within their region. The horse was their symbol of speed, maneuverability and power, on which they protected their lands and attacked other territories, and performed feats of heroism and valour. The strength, power and prowess of the local hero-kings was transferred to *Ayyānar*, the protector, and the steed which gave them their power in battle became his mount. The villagers gave *Ayyānar* the most efficient means of protection they knew of from their local chieftains, the horse and the sword."



19. According to Kramrisch [*Unknown India: Ritual Art in Tribe and Village*, p 57]: "The terracotta steeds are offered to *Aiyanar* by the village collectively or by individual devotees. Larger than real, the horses raise their fiercely noble heads, ready to carry god or demon. The potter-priest gives them basic shapes which he knows how to modify in keeping with the ardent naturalism of South Indian sculpture. He has seen the rearing horses supporting the roofs of the large halls of stone temples of the Vijayanagar style of the sixteenth century (*Madurai Vīran*).” Remarking on the effect of these terracottas as preventatives against disease, Gough [p 260] wrote: "The votive images of bullocks and horses in some of the South Indian village sanctuaries form large herds of animal statuary whose impact by sheer number of their repetitive shapes is as powerful as that of the human votive figures offered for the warding off of epidemics. They form a dam of cumulative units against apprehensions and fears."
20. Many informants interviewed, particularly *Brāhmanas*, businessmen, and academics, denied that blood sacrifices take place in *Ayyānar* shrines. Others were very condescending of the practice, inferring that it was a clear example of the inferiority of the practitioners. The basic theme of a discussion among several professors at a college in Madras in 1981 was that animal sacrifice was in some way associated with 'black magic' and the worship of evil power, and that it should be outlawed in Tamil Nadu. This attitude is particularly evident in a culture which places such a premium value on vegetarianism and conservative *Brāhmanism*.
21. E. Dhanakodi, the *pujāri* at an *Ayyānar* shrine in Vadakalpattu, South Arcot District, remarked: "I have been the *pujāri* in this shrine from my boyhood days and my profession is hereditary. At the time of *Oruthal* festival in *Adi* (June-July) sometimes I make offering of a rooster to this god (*Vilakattu Ayyanarappan*). At that time someone who in making *puja* will bring this rooster with him, along with other offerings, and as part of the '*puja* I offer up its blood to our god. People also give many horses at this time, or else at *Therukūthu* festival which closely follows." Inglis ["Possession and Pottery: Serving the Divine in a South Indian Community", p 97] recorded the placing of fresh rooster blood on the eyes of a terracotta image to open them, thereby giving life to the image. Crooke [p 104] recorded animal sacrifices in South Arcot District in 1894. Jayakar [p 225] documented the sacrifice of a goat at an *Ayyānar* shrine in Pudukottai, Thanjavur District. Krishna [pp 62-63] records animal sacrifices to *Ayyānar's Vīran* at which time a curtain is placed in front of the image of *Ayyānar* so that he might not witness this 'debasing' spectacle. That custom was not observed in this present study.
22. Describing votive terracotta figures of a male and female from Puddukottai, Tamil Nadu, Jain and Aggarwala wrote [p 185]: "Figures like these, of men or *manitham*, women or *penmani* and children or *mazdalai*, are commonly offered to *Aiyanar*... These votive figures are found clustered in sanctuaries, usually in the forest and village boundaries as well as along the inner wall of the temple of *Aiyanar*. Upon wish-fulfilment – usually for the birth of a child or the health of one's parents or spouse – the devotee promises to offer the deity such figures, made upon request by the *Velar* community of potters who also perform the priestly functions in the temple of *Aiyanar*." Commenting upon the same phenomena, Thurston [pp 191-192] stated: "When a married couple is anxious to have female offspring, they take a vow to offer figures of the seven virgins, who are represented all



seated in a row. If a male or female recovers from cholera, smallpox or other severe illness, a figure of the corresponding sex is offered. A childless woman makes a vow to offer up the figure of a baby, if she brings forth offspring. Figures of animals – cattle, sheep, horse, etc. – are offered at the temple when they recover from sickness, or are recovered after they have been stolen." See also Nagaswami p 55.

23. Inglis [Creators and Consecrators, p 174] points out that historically metal vessels were only able to be used by the rich. The increasing availability and greatly reduced cost of aluminium, stainless steel, enamelled wares, and plastics has made that assumption invalid, and traditional prohibitions against the use of non-disposable cooking and serving vessels are being disregarded by householders at every level of society in preference for utensils which are easier to use and are also associated with elitist values. Inglis also noted [*ibid*, p 139] that less than five per cent of the many potters living in the Madurai District community which he documented know how to throw a pot on a wheel, although thirty per cent retain some priestly responsibilities. In Gudithangichavadi, the South Arcot village documented in detail later in this chapter, only two working potters remain where less than thirty years ago there were eight. Vaithyalinga Pathar, a local Tamil potter, remarked that much of the contemporary pottery in his *tahsil* is being made by a village of Telugu potters who have immigrated in this century from Andhra Pradesh, giving further competition to the potters of his village (although these other potters do not sculpt).
24. The styles of sculptures in *Ayyānar* shrines are increasingly influenced by calendar art, cinema, television, and advertising. As villagers are exposed more to public media and, through the expanding availability of affordable mass-transportation, to urban concepts and styles, many express the desire to 'modernize' the images of their deities and votive sculptures, as one villager stated: "to make our village less backward, to be more a part of modern India". Many shrines exhibit a stark difference between the forms of the stucco and terracotta sculptures remaining from earlier this century and those being sculpted today. In Plate 5.13, a clear example of this adaptation, stucco images of *Ayyānar* and his two consorts more resemble comic heroes and the Statue of Liberty than traditional representations of these deities. Inglis [*ibid*, p 255] notes that patrons today are more concerned with preserving existing shrines, building structures to house images which previously would have been chronically replaced with new images, or commissioning permanent stucco images to replace ones which traditionally were terracotta.
25. Examples are the Crafts Council of India's 'Kumbha', a workshop-cum-exhibition on Indian terracotta and village pottery in Madras in 1981; 'Form and Many Forms of Mother Clay', a huge exhibition-cum-workshop of Indian terracotta at the National Crafts Museum in New Delhi from 1983-1985, which traveled to San Diego, California, in 1986; the workshop-exhibitions of Indian craftsmen at the National Crafts Museum, New Delhi, which has monthly changed its roster of participating craftsmen from all over India for the last seven years; the Surajkund Crafts Melā near Delhi which annually brings hundreds of craftsmen to display their production techniques and wares; and the Festivals of India in London (1982), the U.S.A (1985-86), France (1986), the U.S.S.R. (1987), and Japan (1987).
26. Palaniappan has been the focus of several publications: Shah *Form and Forms of Mother Clay* pp 58-60, 115, & 174; Beaudry, Kenoyer, and Wright. "Traditional Potters in India" pp 55-63; Rinzler



"Background on Aiyandar Giant Horse Sculptures of South India" pp 1-4; and Huyler "Gifts of Earth" pp 34-36, and one documentary film: *The Sacred Horses of Tamil Nadu*, written and directed by John Kea, BBC, 1982.

27. Rinzler [p 4] noted: "Beside filling festival orders, Palaniappan also makes sculptures for the All India Handicrafts Board, for sale and show at exhibitions introducing new designs in crafts. When people see his work he receives orders from as far away as Delhi, Bangalore and Calcutta. Through these exhibitions, Palaniappan has been influenced by new designs and Museum pieces to develop and improve his work. Palaniappan explains that his designs are a little different from his father's slightly more exaggerated folk style. His features are a little more naturalistic and easy, without the staring eyes and the arched neck, and his decorations are also a little different."
28. Previously called Guditangichavadi Mathurai, this village had been incorporated into the nearby town of Nellikuppam in 1970, officially shortening its name at that time. It stands on the road between Panruti and Cuddalore and is about 15 miles from the ancient Pallava temple of Tiruvadigai.
29. Although she was very generous to the author with her help and information, she would provide no other name.
30. As is common among Tamil potters, when each of the three brothers married, they established their own kitchens and built walls to separate their portions of the house from the others'. Inglis [*Creators and Consecrators*, p 101] observed: "Each household (*kutumpam*) consists of a number of closely related people who eat from one kitchen and pool their resources. Typically this unit is small and although varying in constitution usually includes only one married couple. Thus, when married brothers share a house, they tend to set up two kitchens and divide the rooms. The same applies when a son marries. The ideal is for a son and his wife to be settled in accommodation separate from their parents." This practice of individual households for each nuclear family stands in direct contrast to the large extended households of most north Indian potters.
31. Vaithyalinga commented; "Due to family circumstances, I have practically disposed of all my farm-lands. Still, as *pūjāri* for the village *Ayyānar* shrine I have the right to farm to temple lands." Regarding the *Velar* of Madurai District, Inglis [ibid. p 158] wrote: "the major form of compensation to the *Velar* for all their services is in rights to produce from temple lands. The temple lands (*maniyam*) are agricultural fields and groves of trees, ponds, and sometimes even small businesses, permanently set aside for the maintenance of the temple and its activities. The traditional sources of these lands are ancient grants from kings or chiefs, although the gifts or parcels of land to temples from wealthy landowners continues even today. ... The word used by *Velar* for rights to cultivation or produce from temple lands is *kaniyatci* or right to tenancy."
32. In most *Kulalar* [potters] houses the wheel is similarly set either in front of or at the rear of the house on a verandah or under an awning. The potting area is rarely situated away from the main dwelling, as it is in other areas of India. During the two long monsoons (summer and winter) the wheel is moved inside the house, generally into a large central room, such as that in Vaithyalinga's house.
33. The *Pūkkuli* is a pit 6.1 metres (20 feet) long and 900 mm (3 feet) wide filled with a bed of coals which is lighted and burned for an entire day prior to the night time ritual. After a period of fasting and prayer to *Śiva*, *Śivakāmi Amman*, *Murugan*, and *Ayyānar* for several days, Vaithyalinga would lead



the ritual by being the first to walk slowly across the coals. Through his piety and the 'miracle' of his unsinged feet, he inspired other villagers, particularly young men, to also walk the pit, and reestablished his position as a deserving spokesman for the gods. Inglis ["Possession and Pottery: Serving the Divine in a South Indian Community", p 91] wrote: "The ascetic feats performed by the *Velar cāmiyāṭi* (priests), such as walking on hot coals (*pūkkūḷi iṟunkutal*), attest to the power of the deity to protect the *cāmiyāṭi* from pain and injury." Archana [p 21] commented: "Fire-walking festivals are held to propitiate the Goddess. Ironically they are referred to as *pookulu* festivals (walking on a bed of flowers) indicative of an inherent desire for relief from the unbearable heat. ...The sighting of a kite (*Garuda*) is considered auspicious as it indicates good rainfall. A trench, 26 feet long and 2 feet deep, is dug and lined with firewood. When the *Garuda* is sighted the fire is lit. People sprinkle the fire with salt, pepper, butter and ghee. It is believed that if the salt rubbed on the bodies of those suffering from boils is thrown into the fire, they will get relief. As the flames turn into hot embers the fire-walkers take a purifying dip in water and with neem leaves tied to their waists and held in their hands run across the fire-bed to the sound of "*Aho Ayyaho*."

34. Vaithyalinga said "Our tools are sacred to us, our gods have given us a gift to make these pots and figures, and we must give *pūjā* to them regularly. I make a small *pūjā* everyday; But on special days such as *Pōṅgal*, my whole family joins to make offerings of food and flowers to our tools and to the gods who have given them to us. By honouring our wheel, paddle, anvil, and other tools, we hope that they will help us in the coming year to still make good items."
35. Inglis [Creators and Consecrators, pp 142-143] wrote: "Our review of the history of craftsmanship and of references to craftsmen in South India provided evidence that potters were often included in the traditional lists of 'village servants', those castes most directly involved in the *jajmani*-like system. They have been linked to the 'right' division of South Indian castes, which historically identify with rural territory and are economically dependent on the productivity of the soil." Inglis observes that *jajmani* relations for potters are rapidly becoming more limited or even dissolved in some areas, and that potters are forced to augment their traditional means of income with that from other sources. This observation concurs with the Vaithyalinga data which recorded that half of that potter's pottery production was sold for cash.
36. This was a very low income even in 1980. By 1990, the high rate of inflation would cause a potter working in similarly impoverished conditions to make approximately eight hundred Rupees (£26/66p or \$44.44) per month. The exchange is based upon 1980 rates.
37. "The *vattiyar* is paid for his services by the families or lineages of the subcaste for whom the rituals are performed. Payments are not fixed but vary with the length and complexity of the service and the affluence of the sponsor. ...Ritual payments to the *vattiyar* includes coins placed in the bottom of pots of holy water (*kumpakanikai*), towels (*tuni*), or body cloths (*veti*) all of which are common payments to ritual specialists in South India [*ibid.*, p 87]."
38. The *Velar* documented by Inglis were meat eaters [*ibid.*, p 282].
39. Those shrines were in Gudithangichavadi, Nellikuppam, Elumedu, Vaidipakkam, Cholavalli, and Valupattu. Vaithyalinga also conducted many of the rituals associated with *karumathi*, the eleven sacred days following a death. For each *karumathi* he sculpted in clay a *Śivaliṅga*, a *risabam* (bull)



- and eight *pardesis* (lotuses). In his village *Brāhmans* took no part in these ceremonies; all the rituals were performed by Vaithyalinga and the *madathais* (non-*Brāhman* priests) from the local temple.
40. Vaithyalinga remarked, "I get my clay from about one-half mile from my house from a place near the main road. My father and my grandfather also dug their clay there. ...No, there is no secret about where it is, everyone here knows it. ...I get it during the summer season. If we get clay during winter it would be very difficult for us to prepare it ready for work (*i.e.* it would be too wet)."
  41. The following description documents the construction and firing of a *kūthukūthurai* horse specially commissioned for this thesis. The potter was given no instructions or advice as to the size, form, or decoration of the figure, although he frequently asked for such advice. Also commissioned, but not documented in this thesis, were a *thoṭṭilam piḷḷaiyam* and a sculpture of *Ayyānar*. He was asked to describe his sculpting process in his own words as he went along, recorded on a microcassette for later translation in Madras by Shiva Kumar. By nature, interaction with a foreign researcher had an effect upon Vaithyalinga's life and products. Although every care was given to not influence his work, the sculptures commissioned were different and more 'modern' in style than those images previously sculpted by the potter and still standing in nearby shrines.
  42. Inglis [*ibid.*, p 229] noted that the *Velar* sculptors mixed with new clay a handful of dirt composed of the remains of previous images and taken from the floor of the shrine to which the new image would be dedicated. Vaithyalinga did not observe this custom.
  43. Rajambal remarked, "I cannot sculpt large images like this by myself, I can only make smaller ones. But I can help in some decorations on the large pieces."
  44. The updraught brick kiln used by Palaniappan, described earlier, is a rare exception.
  45. No record has been discovered of any other terracotta sculptures, prehistoric, historic, or contemporary, as large as these and other comparable Tamil figures. Statements have been made referring to some Tamil terracottas as high as 7.5 metres (25 feet), but that claim is unsubstantiated and in this survey over twenty years, none of that size has been found.
  46. The entire process of constructing and firing a 2.7-metre-high (nine-foot-high) terracotta horse was documented in Puttur, near Chidambaram, South Arcot District (approximately 120 kilometres from Semakottai) by Ron Dubois and Stephen Inglis in 1981 and published as: Dubois "The Aiyandar Horse". Photographs of that process appeared in Inglis "The Craft of the Velar", pp 17-18. The procedure required twenty days work by four potters for a commissioned sum of 500 rupees (£29 or \$50). Dubois also released a film documenting the production entitled *The Working Processes of the Potters of India: Massive Terracotta Horse Construction* [Oklahoma state University]. See also Inglis *Creators and Consecrators*, pp 267-271.
  47. The single recorded contemporary commission of a gigantic terracotta figure, sixteen feet high, ended in disaster [BBC documentary film: *The Sacred Horses of Tamil Nadu*, written and directed by John Kea, 1982). The potters had sculpted horses comparable in size to the one documented by Dubois, but none had ever attempted one of greater proportions. Lack of correct technology caused the horse to collapse during firing.



48. Although sometimes *Māriamman's* shrines contain terracotta images of the goddess, or those of the *Sapta-Mātrika* (the seven Mother Goddesses, of whom *Māriamman* is one), the most frequent terracottas given to her are *thoṭṭilam pillaiam* as part of requests that she cure diseased devotees (see Chapter Three, footnote 9, and Plate 5,48). Vaithyalinga noted that at *Māriamma's* seven day summer festival usually seven to eight devotees from Gudithangichavadi offered her *thoṭṭilam pillaiyam*.
49. Photography was not permitted at this festival and, consequently, all remaining plates depict sites photographed at another time.
50. Vaithyalinga commented "Every year the organizers of the *Therukūthu* festival collect money from all the villagers for conducting the festival. Unfortunately during certain years the money collected is misused resulting in cancellation of the entire festival.
51. Rinzler, pp 3-4, A thorough account of the *Therukūthu* festival in North Arcot District, especially focused upon descriptions of its individual form of folk theatre, may be found in Devika, pp 60-68. As part of the festival there, the villagers construct a twelve metre (forty foot) long mud image of the warrior *Duryodhana* upon the ground, around which much of the drama takes place.
52. Describing the position of the *vāṭṭiyār* among the *Velar* potters, Inglis (*Creators and Consecrators*, pp 83-84) wrote: "The responsibility for the ritual supervision of *Velar* participation in both the festivals and for conducting all major subcaste level rituals lies with the subcaste priest or *vattiyar*. This specialist prepares and administers the crucial rituals which mark stages of infancy and youth, puberty, marriage and death. ...The term *vattiyar* is commonly used today to mean 'teacher', and more specifically school teacher, but also has wider connotations of 'learned person' which are appropriated to the position under consideration. The *Velar* consider the most outstanding skill of the *vāṭṭiyār* to be his ability to recite *Sanskrit* verses (slokas) which accompany various life cycle rituals. It is apparent that his knowledge of the correct procedure for complex life cycle rites, which are often performed amid a frenzy of interruptions, arguments and excitement, is every bit as essential." Inglis goes on [ibid. pp 84-87] to describe the apprenticeship and later duties of the *Velar vāṭṭiyār*. He also notes [ibid. pp 283-285 and "Possession and Pottery: Serving the Divine in a South Indian Community", pp 91-95] another role of the *Velar* priest as *cāṁiyāṭi* (literally translated as 'god-dancer'), which encompasses his position as medium who in ecstatic trance states communicates directly the words of the deity to the devotee. Although neither Vaithyalinga nor the people of his village or environs used the word *cāṁiyāṭi*, it would in essence also apply to his similar role as spokesman for the gods. The terms regularly used for Vaithyalinga were *pūjarī* or *vāṭṭiyār*. As will be seen, he was regularly possessed in trance by the gods; he felt that he was taken over by their spirits to advise and counsel the participants of special *pūjās*.
53. The previous account of Vaithyalinga Pathar and his activities is taken directly from personal observations gathered over a three-year period (1980 to 1983). The author was planning to attend a *Therukuthu* festival with Vaithyalinga when the potter died in 1983, and that trip was cancelled. The description of the festival and dedication of terracottas to *Ayyāṇar* is compiled from interviews with Vaithyalinga and others, observations of other Tamil festivals, and the research and writings of Stephen Inglis concerning the *Velar* of Madurai District [*Creators and Consecrators: A Potter Commu-*



- nity of South India, "Possession and Pottery: Serving the Divine in a South Indian Community", "Making and Breaking: Craft Communities in South Asia" and "The Craft of the Velar".]
54. Research among other Tamil-potter-priests has indicated that in preparation for festivals, they also avoid sex and involvement with any life-cycle ceremonies, especially the pollution generated by births, menstruation, and death [Inglis "Possession and Pottery: Serving the Divine in a South Indian Community", p 91].
  55. The moment when the eyes of a sculpture are finished, whether painted, chiseled, moulded, or carved, has been recorded throughout Indian history as particularly significant, e.g. *Kasyapa-Jnanakandah* 60 [Goudriaan pp 174-175] and Coomaraswamy pp 49-53. Inglis "Possession and Pottery: Serving the Divine in a South Indian Community", p 97] described the opening of eyes of a terracotta image by touching them with the bloody toe of a rooster. Regarding the painting of the eyes of a primary deity image, Inglis [*Creators and Consecrators*, pp 240-243] commented: "The eye-touching is a crucial point in the festival because, as far as the assembled crowd is concerned, it is the moment when the deity actually becomes manifest in the image. The implication is that once the deity can 'see' through the image, it can become fully present. ... The *Velar* is the only one who can consecrate the image, precisely because of the danger involved. The 'arrival' of a local deity to be honoured in a new image at a festival is a highly charged moment when the boundary between human and divine and between chaos and control becomes especially tenuous. ... The gaze of the deity as the image's eyes are opened is overpowering and could be fatal unless mediated by a specialist. ... The *Velar* absorbs the withering look of the deity and passed on the merit of the image, with deity now fully manifest and properly contained, to the landowner patrons and their village neighbours." "For the *Velar* today, the eye-touching ritual retains its economic importance as a point in the image-making process when pressure can be exerted on the festival patrons if the arrangements are unsatisfactory or the correct payments have not been made. The image is unfinished and of no use until the eye-touching is complete and no one but the *Velar* can complete the image in this way. With the crowd assembled and musicians and other specialists hired, any delay is costly, embarrassing, and potentially dangerous for the patrons. Knowing this, the *Velar* can refuse to perform the ritual unless accounts are settled [*ibid.*, p 241]."
  56. Concerning Ayyānar's nature, Vaithyalinga stated, "We don't find fierceness in the face of the District Collector or the District Superintendent of Police, whereas we find fierceness in the face of the Constable. Likewise, the *Veeran* is fierce, but *Ayyānar* always remains serene."
  57. This prayer was recorded at a terracotta dedication at another *Ayyānar* shrine; but when asked directly about it, Vaithyalinga confirmed that he would recite the same words during the *pūjās* at which he officiated.
  58. Inglis wrote "The presence of the deity is felt so powerfully that to utter a lie in its presence, it is believed, brings calamity to the teller. Many of the disputes, such as proof of adultery, repudiation of loans received and other such matters, are settled even to this day in the village temple. In many interior villages, there is no need for civil or criminal courts to decide the nature of punishments. The temple of the village god, the impersonal spirit that permeates and rules the society, is sufficient to take care of the evil doers." As spokesman possessed by *Ayyānar*, Vaithyalinga acted as judge and juror of village matters.



## EARLY NORTH INDIAN TERRACOTTAS

R. C. Sharma

The well known saying goes - 'Gangodakena Gangārchanam' i.e. worship of Gangā by her own water. This is very true in case of the terracotta art in the Northern India. Goddess Earth presented herself in the most ductile and malleable form and the plasticity of the alluvial deposits on the banks of the important rivers in the North provided ample scope for quick handling resulting in the furtherance of terracotta art. This was not so in the Deccan or South where the clay is hard and rough due to rocky ingredients and the alluvial silt deposit is a rare feature (Dhavalikar, M.K. *Masterpieces of Indian Terracottas* 1977, p. 2). In appreciation and recognition of this generosity of earth goddess the man in the North reacted gratefully and respectfully and the first figurines are correctly identified as mother goddess in different forms as Mahīmātā, Aditi, Prithivī etc. The progeny, fertility, productivity, prosperity and multiplicity are best represented by earth which is the root cause and origin of generation.

The discoveries at Mehargarh in Pakistan have pushed back the chronological sequence of the proto-historic period to several thousand years and the earliest terracotta figurines are now dated back to about five thousand years B.C. We, however, do not know as what should be the exact affinity between the proto-historic and the early Northern Indian terracottas. Although the subject matter is same i.e., representation of female figures or mother goddesses yet the treatment differs and there is a big gap of time between the two.

The important sites which yielded an appreciable number of terracotta figurines in the northern region are situated mostly in Uttar Pradesh and particularly near the two important and sacred rivers namely, Gangā and Yamunā or their tributaries. These are Mathurā, Ahichchhetrā (Bareilly), Śrāvastī (Gonda), Bhītārgāon (Kanpur), Kauśāmbī Jhūsī, Bhita (Allahabad), Ghosi (Azamgarh) and Rājghāt (Varanasi). Of these, Śrāvastī and Bhītārgāon are known for the Gupta period terracotta brick



temples and it is quite likely that the desired material was brought from some important centre producing beautiful clay figurines. To the east of Uttar Pradesh Buxar and Bulandibagh (Patna) are other famous centres in Bihar and in further east are Tamruk and Chandrakhetgarh in West Bengal and Mainamati and Paharpur in Bangladesh.

The terracotta art was so popular that the dramatist Sudrak Captioned his work as *Mritichhakatika* (terracotta cart) with which boy Rohasena son of Charudatta played. *Mahābhārata* refers to the image *Dronāchārya* in clay which was worshipped by Ekalavya (M.B. *Ādiparva* 123.12). Terracotta image (*mahāmāyī mūrti*) of Durgā was consecrated for worship (*Markandeya purāna*, *Durgasaptasatī* XIII.7). Kalidasa informs about a painted terracotta peacock *varna - Chitrita - mrittika - mayūra* (*Abhijñāna Śakuntalam* VII.) Bana speaks rather elaborately in the *Harshacharita* and a large number of beautiful terracotta figurines were got prepared on the auspicious occasion of the marriage of Rājyaśrī. The word used for the art is *pusta* and the modellers were called as *lepyakāra*. Buddhaghosha gives the term as *potthak rupa* (Agrawala, V.S., *Indian Art*, 1965, pp. 308-9). A fairly early Jaina text *Uvasagadasāo* informs that a potter (*kumbhakara*) named Saddalaputta had five hundred terracotta workshops and supervised the work of a big number of potters whose products must have been innumer-

able. (Desai, D. *The Social Milieu of Ancient Terracotta, From Indian Earth*, 1986, p. 30).

The clay art has served different purposes in the Northern India. It was used for decoration, ornaments in shape of beads, gifts, amusement, games, toys and sports, worship, ritual offerings and occult use. About early figurines Sir Auralstein observed, 'If a conjecture may be hazarded it looks as if the little figurines so uniform in features and styles might have been intended to represent some tutelary goddess' (*Archaeological Survey Memoirs* No. 37, p. 38). A. K. Coomaraswamy held the same views 'Archaic Indian Terracottas' *IPEK*, 1928). V. S. Agrawala thought that the female figures should be accepted as the Vedic deities as Prithivī, Simīvali, Aditi, Mahīmātā. Eagle headed figure may be identified as Suparnā or Vinatā the mother of the great eagle Garuda (*Mathura Terracottas*, *Journal of the Uttar Pradesh Historical Society* Vol. IX July 1936, pl. II, pp. 14, 23-24). K. N. Dixit opined that the 'mother principle' being one of the earliest forms of worship among several ancient races of the world (*Archaeological Survey Report* 1924-25, p. 72).

Pedagogical use of terracottas was also experimented. An early Sanskrit text *Kasyapa sāṁhitā* suggests that different types of terracotta figurines like animals, birds, chariots, boats, toys should be arranged in a circle and the child be asked



to touch one out of the lot. This was the test to know his inclination and to decide his future profession and he was naturally trained to follow it up. (Shah, U. P., 'A Reference to Toys in Kashyapa Samhitā' *Journal of the M. S. University, Baroda*, Vol. V, No. 1, 1956, pp. 1-5). The twelfth chapter of this text furnishes useful details with regard to the preparation and polishing of toys. To make the child familiar with the family members and relatives the terracotta figures were shaped differently and named accordingly. This amply widened the mental horizon and helped the boy to behave as the occasion demanded.

The manufacturing of terracottas (*mrinmayī*) has been discussed in another text, *Nāradiya Samhitā*, assignable to the post-Gupta period. It suggests that the clay of good quality should be brought from the bank of a river or from similar spot. The dry mud should be sieved through cloth and powder of metal (*sarva lohamaya chūrna*), sand (*śarkarā*) and sand (*pāsāna chūrna*) before adding water and vegetable material like *khadira*, *arjuna śrīvasta*, *kumkum*, *kushta* and varieties of *kakuta*. Proper kneading mixing and churning gave better result. The paste was dipped in the water for two months and then it was ready for preparing the desired size of terracottas (Joshi, N.P., *Vaishnava Iconography in the Nāradiya Samhitā*, *Bulletin of Museums and Archaeology in U.P.* Nos. 11-12, 1973, p. 8). This work seems to hail from the southern part of the country as such elaborate procedure was not desirable in the northern part where fine clay is available from rivers

and pools. But even in North the course must have been adopted where the quality of mud was of inferior quality. Moreover, the further details suggest that the technique was particularly followed for making large size images.\*\*

The chronological sequence of the North Indian terracottas is as follows. (Agrawal, 1936, pp. 13-17).

#### A. Pre-Mauryan

The figures are completely hand modelled mother goddesses in grey colour with their faces shaped like bird or animal. The hair is indicated by a few vertical lines on the forehead, the eyes are incised and the nose is shaped by pinching. Ornaments and some limbs of body are applique treated or carved out from the body material itself. The figure usually bears punched circular marks and the body is bare although the mount of venus is not conspicuous. The arms if intact, are spread out horizontally, the hips are broad and the waist is narrow. The girdle is either shown by a row of sunken punched marks or by a grooved line. The navel is shown like a sharp pointed hole. The legs are separated and form an arch. The overall formation of body is rather crude, primitive and disproportionate. These are the general characteristics of pre-Mauryan terracottas which have occasionally been called 'archaic' 'ageless' and 'timeless'. A good number of such figures has been found from Mathurā and some from Buxar, Sonpur, Chirand (Bihar) and Atiranjikhērā (Uttar Pradesh). The stylistic analysis



suggested by Agrawala has almost been confirmed by the stratified material and their appearance from the pre-coin early and sometimes even from pre-northern Black Polished levels (Desai *op.cit.* p. 30). But not a single pre-Mauryan figure has so far been picked up from the layers from Mathurā, the main source of such objects. (Joshi, M. C. and Margabandhu, C. *Journal of the Indian society of Indian Art*, pp. 18-19).

Although the material available at hand is scanty yet it is possible to classify them into some groups according to their nature and features. Sometimes, the face is shaped by the beak of the eagle (*suparnā* or *gārudī*) while the other figures display an inconspicuous depression of a quadruple or a wide open cavity. At times the nose is modelled just in continuation of the forehead, giving the impression of a pig or boar (*vārāhi*). The figure bears one or two holes for nostrills and in some cases the slit of the mouth covers the lower part of the nose. The eyes are lozenges shaped or semicircular in slanting position. In some cases the eyes are seen out of symmetry. Many have prominent breasts but are a few in which only outlines are suggested. Nipples are pointed or marked with pinholes or grooves. Neck, shoulders and some other parts are in punched circles. There are single or double rings in the ears and in other specimens the earlobes are stamped with a rosette. The forehead is seen with a row of sunken circles, rosettes or suspended beads. (Sharma R. C., Discoveries from Govindnagar, *Buddhist*

*Art of Mathurā*, 1994, p. 90) A circular mark in the centre of forehead is quite frequent and indicates the prevalent social custom of a married lady, a practice continued till date. This may also be considered some aesthetic sensibility of the potter or an auspicious mark.

The applique put up jewellery presents a rich variety. Single or several rows of circles on the projecting bands should be explained as beaded strings. These were either worn independently or just a supplementary item to the main ornament. Torque round the neck with one or two bands is a common feature. It has sometimes a chain of circular beads or a drum shaped bead. The necklace with criss-cross decoration is worn across the shoulders and passes above or through the breasts. Single or double strings of this wearing hang down between the bosoms. A big garland like ornament occasionally suspends from shoulders to the waist. The navel is indicated differently by an incised circular mark or a round cavity or a pinhole.

#### B. Mauryan :

The archaic group is followed by a developed variety of terracottas which are to be dated between the fourth and the second century B. C. While a number of features of archaic conventions some like hand modellings, gray colour, applique treatment continue, some new trends are introduced. The face is oval and bears large eyes. The number of ornaments increased and the hairdo becomes elaborate with



floral decoration. The breasts and hips are large and exaggerated. There is change in the technique of production as sometimes the face is pressed out of a prepared mould and the remaining body is hand modelled. The other notable development is the production of male and animal figures, although the female figures continue to dominate. The transformation from bird or animal to human face is a big landmark. At mathura the grey colour remain a strong period feature but at sites in east ochre colour emerges (Sharma, *op.cit.* p. 92). We are aware of the fact the Mauryan empire has a good deal of interaction with the foreign lands and this fact is well captured in the terracotta art of the age. The bearded man eating in plate from Mathura, dancing girls from Sonpur (Patna) do bear Iranian and Hellenistic ethnic features (Desai, *op.cit.* p. 32).

Do we then presume that like court art in stone there was some patronage to the potters particularly in the vicinity of Pataliputra and they were known as Rājakumbhakāras mentioned by Pāṇini and also in the Jātaka stories. The Chullakasethi and Kusha Jātaka and Patanjali or Pāṇini (Mahābhāshya II. 1.1) state that the carpenter employed by the king did not undertake any private work. Taste, fashion and emotions start emerging from the terracotta figures of the Mauryan age. Ornaments, hairdo, elaborate turban and sometime extra high coiffure of ladies bespeak the outburst of the emotions of the rural and the then developing urban society. Some terracottas from Buxar are the

best citations of this assessment. It appears that the cult of mother goddess of the preceding age had diversified itself into social and aesthetic realms. Artistically, the terracottas from Bulandibagh (Patna) seem to be better products than specimens of the Mauryan period. Their size, sharp features, excellent finish and facial expression are remarkable. These 'clay sculptures' support the conjecture or royal patronage to the terracotta art to meet the requirement of noblemen at least in a limited region adjoining the capital of Magadh.

### Śunga :

The terracotta art progressed in the revolutionised form in the Śunga period 2nd-1st century B.C. The hand modelling reached almost the terminal point with the collapse of the Mauryan empire and the complete moulds were introduced. Sometimes, double moulds were used to shape the back portion. The new technique (use of mould) was responsible to widen the popularity of the art of clay and also to meet the growing demand of people. The early monotonous (except near Pataliputra) tradition of shaping mother goddesses was replaced by a variety of subjects. Several new deities appeared viz. Kāmadeva (god of love), Gajalakshmi (goddess of wealth), Vasudhārā (goddess of abundance), Śrīdevī (goddess of prosperity) *yakshas* (semi-divine beings) etc. Besides, the male and female figures were shaped together and this was introduction of human secrecy to the world of aesthetics. Gradually, amorous



and erotic figures came into existence. The art historians have tried to make some distinction in the representation such couples. If woman is on the left of the man it is to be treated as *dampatī* (husband and wife) and if the case vice-versa it is to be explained as *mithuna* (lover and beloved). It may be presumed that some romantic stories like that of Dushyanta and Shakuntala and Udayana and Vasavadatta inspired the potters to incorporate this subject matter in the medium of clay (Sharma, *op.cit.*, p. 92-93). We have come across a few pieces from Kauśāmbī depicting the elopement of Vasavadatta by Udayana and love story between Dushyanta and Śakuntalā in the *aśrāma* (hermitage) of Kanva.

The terracottas of Śunga period can be considered at par with the contemporary stone sculptures. The low relief remains a striking identity of the age in both the cases. The stone sculptures were carved by the wood and ivory carvers using small tools only and as such high and bold relief was not to be produced. With the introduction of moulds the low relief or flatness was the natural result in the terracotta figure making. The low relief has affected the expression which remains in low relief in the Śunga figurines (Kala, S.C., *Terracottas of North India*, 1993, p. 2). The double knotted turban on the male head, tastefully arranged hairdo with different braids of ladies with a number of auspicious motifs like *svastika*, *ankuśa*, *māmamithuna* etc. used as hair pins and ornaments are seen in both the media. Now

the red colour dominates although Mathurā continued to produce gray with red. A slip in black and also in red is also occasionally seen applied probably to impart better look and this thin and smooth coat also served as preservator to the figure from adverse climatic conditions and particularly from dampness. Nothing can, however, be commented as to what extent the users were conscious for preserving their items. The hole on the top of the plaque proves beyond doubt that these were suspended against the wall through string and did serve decoration and artistic purpose.

Another fact which comes to light through the terracotta art of the Śunga period is that like stone sculptures it does not negate the preceding Mauryan tradition. The mould had already appeared for the limited use (face), new themes had also started (like animals and male figures) and the Śunga age potter further fructified these features giving novel and more popular dimensions. Thus the clay art of Śunga age should be accepted in direct succession of the Mauryan convention but it is not the same case with stone sculptures. The reason being that the terracotta art was basically the peoples' art through the ages while in the reign of Aśoka a new experiment in stone sculpture emerged under the patronage of the emperor and this formula was never accepted by traditional artisans. The royal dignity of that period was not concerned with clay art which was supposed to be the poorman's commodity, although as already discussed some pockets of potters near the



capital did try to accommodate with the requirements of the nobility. But it remained rare and confined to the limited persons only.

The female figures (even deities) in the Śunga period are ill clad or shown nude. They wear number of ornaments but the garment is so thin and transparent that the sex organs are clearly visible. Sometimes, the mount of venus is covered by jewellery and particularly by the strings of girdle. This was in continuation of archaic nude mother goddess to stress upon fertility and abundance. These (Śunga) figures may safely be compared with contemporary and earlier ringstones or disc stamp in which the nude female deity has repeatedly been shown and the object appears to be the representation of the cult of mother goddess. Coomaraswamy observes that such depiction is in continuity of India's cultural convention and 'spontaneous conception of fruitfulness and beauty as inseparable qualities' (Early Indian Terracottas *Museum of Fine Arts Bulletin*. Boston Vol. XXV, 1927, p. 96). The seed of amorous and erotic sculptures of Medieval India was sown in the *mithuna* or *dampati* terracotta plaques of the Śunga age. It remained dormant or concealed for about one thousand years despite its conspicuous illustration at Chandraketugarh, Tamluk and to some extent at Kausāmbī.

The clay art of this age provides sufficient evidence to study the contemporary society. No other medium in any period furnishes such useful, natural and prolific material as the Śunga period

plaques. The moods, modes and movements of people have been spontaneously captured by the potters. This phenomenon was a nationwide feature and not confined to a reign (Biswas, S.S., *Terracotta Art of Bengal*, 1981, p. Ch. 6). The rich jewellery worn on figures, variety of hairdo, religious and cult faith sports, entertainments, ceremonies, festivals and even the private life of people, all have been projected with no reservation. Thus the Śunga period clay figurines function as real mirror to have a glimpse of the people of the age.

### Kushāṇa :

The terracotta art in the Kushāṇa period (c. 1st to 3rd cent. A.D.) back. There is no comparison between the sophisticated and excellent figures of the preceding age and the crude and grotesque products of the Kushāṇa period. No convincing explanations has come forth. It is quite likely that by this time the society with its prosperity, had fallen in love with stone and the terracotta art suffered. V.S. Agrawala thought that the 'crude style in this period may have been due to the influx of wild tribe from Scythia in Ser-India, with their crude art canons.....' (Terracottas from Ghosi' *Journal of the U. P. Historical Society* Vol. IX pt. i, 1937 p. 63. It may further be presumed that the potter of the age captured the wild, barbarous and crude looking foreigners in the products. In stone portrait images of Kushāṇa rulers were made and installed at Mat (Mathurā) and Surkhbotal (Afghanistan) *devakulas*. Follow-



ing this new formula potters must have tried to produce portraits in clay on demand of officials of lower income group.

While the use of single or double mould lingered on, the primitive hand modelling revived. Consequently, the body is rather rough and coarse with disproportionate limbs but the expression is often bold, suggestive and faithful. When two moulds were used the body was hollow. The new divinities who emerged and became popular were Mahishāsura-mardinī, Kubera, Hārītī, Nāgas, Nāginis, Balarāma, Kārttikeya, Saptamatrikās etc. Kubera and his associates of attendants (*yakshas*) were given a grotesque figure with pot belly as the very name Kubera means a person having a bad (*ku*) form (*bera*). This may be another explanation of crude figure of the period. The *yakshas* had two forms i.e. benevolent who were good looking (*saumya*) or (*svarūpa*) while the others of malevolent nature were ugly (*arūpa* or *virūpa*) (Matsyapurana 154, 524-45). Owing to dwarfish form they were also known as *Vāmana* or *Vāmanaka*. Votive tanks (*pūjāsarovara* or *yamapūkura*) were also prepared for sacrifice and offerings (*bali*). Bodhisattva figures of this period have come from Mathura and Hastinapur. The nude goddess with head finished like lotus was also a new addition. This has been differently interpreted as Prakriti, Lakshmi and Lajja Gauri. The figure hailing from Kauśāmbī is in the Allahabad Museum. Stone sculptures with the same theme were also carved in later period.

All early important sites continued to produce terracottas in the Kushāṇa period as well but the number of production considerably decreased. Ghosi in Azamgarh (Uttar Pradesh) emerged as an important centre of clay art. Although the north witnessed the decadent stage of this medium of artistic expression, Deccan under the Sātavāhana rulers saw the dawn of terracotta making in the same period. Beside figurines and plaques, we also come across the household items and architectural components from the pre-Kushāṇa and Kushāṇa period levels in the excavations in north. The site of south excavated by H. Hartel of Berlin yielded bricks, tiles and other material for floors as well for laying roofs. The pinnacles of roofs are of particular interest and an important aspect remains that some of these bear shinking green glaze (*Excavations at Sonkh*, 1993). Such items (glaze tiles) carved with different motifs) were recovered earlier also (Sharma, R. C. *The Splendour of Mathura Art and Museum*, 1994, p. 61). This may be accepted as an important evidence of prosperity and growing urbanisation as also suggested by R. S. Sharma (*Decay of Gangetic Towns' Proceedings of the Indian History Congress*, p. 93). B. N. Mukherjee also holds the same view particularly about Mathura which was an important seat of the Kushāṇa rule (*Growth of Mathura and its society, Mathura the Cultural Heritage* 1989, pp. 63-64). Sometimes the objects were inscribed and we find the Brāhmi letters reading Kachhipasa and Sivasa (*Ibid*).



An interesting point revealed from the excavations at Sonkh is that in Kushāṇa period itself moulds were prepared from the contemporary sculptures to produce terracotta figurines. The lintel of the Nāga shrine was certainly used for this purpose as we recovered a mould and also its product from the Kushāṇa levels. It is quite likely that such items were produced under the instructions of the temple management for distribution or sale to the devotees who assembled there for performing *puja* (worship). They carried these handy items as temple tokens for worship or display.

#### Gupta :

The terracotta art in the Gupta period revived with great zeal and enthusiasm in the Gupta period (4th-6th century A.D.). The prosperous society of the age fell in love with decorative art and clay figures

also played a key role. The products found an alluring market with the emergence of temples and big size terracotta plaques depicting different forms, motifs, deities, their deeds and other human figures were put up on the exterior wall of the temples and the wealthy persons displayed them in their drawing rooms. The products are the result of fine workmanship. The body of the figure is slim and shows lovely curves and contours. There appears no difference in the quality of stone and terracotta sculptures. Beside physical beauty the expression betrays the same feeling of calm, joy and bliss. Ahichchhatra, from where the highly appreciated slightly less than life size clay statues of Gangā and Yamunā hailed, was a great centre of the period. Śrāvastī and Bhītargāon were other prominent sites. As a result of constant disruption and invasions in the northern India the art and artisans moved eastward.



## TERRACOTTAS OF MID EASTERN INDIA WITH SPECIAL REFERENCE TO BIHAR

C. P. Sinha

The word 'Terracotta' denotes baked clay but the product more frequently relates to human or animal figures or statuettes, which either represent gods or goddesses or ritual objects with mythological themes woven round them or represent dolls or toys and other objects of visual interest. Terracotta art widely spread in India from the remote past and has continued unabated till today.

Terracottas or clay sculptures occupy an important place in the history of plastic art of India. Bihar is one of the most important Indian states which has yielded various types of terracotta figurines beginning at least as far back as third millennium B.C. down to the end of Pala period around 11th - 12th century A.D. and the study of these terracottas is essential to complete the history of plastic art in India.

The most important and prolific centres of Bihar terracottas are : Chirand, Belwa and Manjhi(Saran district) Balirajgarh Madhu-bani district) Katra (Sitamadhi district) Chechar, Hajipur and Vaisali (Vaisali

district) Lauriya Nandangarh (West Champaran district) Kumrahar, Bulandi-bagh, Mahavirghat in Pataliputra (Patna district) Rajgir and Nalanda (Nalanda district), Oriup, Champa and Antichak (Bhagalpur district) Taradih, Sonpur, Dharwat (Gaya district) Chausa and Buxar (Buxar district) and many other sites in Bihar. These terracottas include both surface collections and those discovered from the stratified layers.

Majority of the significant terracotta figures are accidental finds. In fact, no accurate data with regard to the strata of their discoveries are available. So we have to rely upon their style and technique, Coiffure and costumes, physical features, facial expression and the quality of the clay used and by comparative study with the stratified objects found in other sites. And the terracottas from the stratified layers pose no problem with regard to their date.

These clay figures and figurines reveal the use of various techniques. As a matter of fact, the technique of making terracottas underwent improvement or changes, hence



we find that several methods had been used. They are hand-modelled as well cast in moulds. They were made from single as well as with double moulds. Some of them are coloured also. Clay craftsmen were intimately in touch with the life of the people - rural and urban and there is hardly any aspect of life that had not found place in their works.

The neolithic Chirand has added a new page in the history of India. The numerous tools, pottery and other antiquities have been found in the neolithic cultural complex at Chirand. The earliest hand-made terracottas of human, animal and bird figurines were discovered here.<sup>1</sup> We have humped bull and dove like bird, all hand-made. We have one hooded snake and a coiled snake. Neolithic terracotta figurine of bull, serpent and crude female figurine provide the earliest material evidence of religious beliefs. The most notable, however, is the archaic female figure of Mother Goddess<sup>2</sup> measuring 5.5 cm. in height.

Its head portion is shown with a cup-depression and in the centre of this stem like object, two prominent breasts are shown. Navel is shown by a prominent hole. Her genital is suggested by a pin-hole. Punctured designs have been rendered between the breasts and the navel. A few punctured designs can be seen on the right breast. The bottom portion is again stem like and partially broken. The back portion of this figurine is decorated with nail marks. This particular figurine is one of the earliest representations of mother-god-

dess in the region. Besides the neolithic Chirand, the site of Taradih near Bodh Gaya temple is another neolithic site which has yielded terracotta figurines from the neolithic level.<sup>3</sup> Among them the terracotta bull is very important.<sup>4</sup> Humped bull terracottas of neolithic period have also been found at Piklihal, Sangankalu and some other sites.

Although the artists of the neolithic phase have not succeeded in portraying the above mentioned objects exactly like their natural counterparts, still they have succeeded in giving them some definite forms. In a way, such representations appear to be of magical character. It has, therefore, rightly been observed by the great art critic Fischer<sup>5</sup> that art in the beginning was a magic tool and had little to do with beauty.

The neolithic culture was followed by the chalcolithic cultural remains noted at Chirand, Sonpur, Oriup, Taradih, Chechar, Maner, Senuvar and Hajipur. The terracotta art predominates in the subsequent chalcolithic period. A flourishing chalcolithic culture was met with at Chirand. From period II of this site bull figurines have also been found. They are remarkable for their striking similarity to their counterparts in the Harappan context. Among them, the bigger one is 4.1 cm. in length and its total height is 3.6 cm. It has pointed mouth with its ears and horns broken. There is perforation near its nostrils also. Its hump is very prominent and its tail is also represented prominently. Its pair of legs both front and hind are fused. The



bull figurine is very small<sup>6</sup> in size measuring 2.8 cm x 1.9 cm only. Its legs are shown separately but the head is broken.

A miniature sarcophagous<sup>7</sup> has also been unearthed from chalcolithic levels at Chirand. It is polished red and measures 9.5 cm x 5 cm on its body and outer belly portion bear some line drawings in red ochre and keolin. Its only leg is extant, which is approximately 2 cm in height.

The excavations at Oriup, about 2 kms to the west of Antichak by the Deptt. of Ancient Indian History and Archaeology, Patna University has revealed three periods of occupation. Period I, which is early chalcolithic, is characterised by the occurrence of coarse black and red ware, red ware and black ware. A terracotta female figurine, probably a Mother Goddess was found in this level.

Excavations at Taradih have also brought to light antiquities of the chalcolithic complex. Period II of this site is marked by the appearance of chalcolithic remains. The materials discovered at the site from this period revealed that the people had fancy for ornaments made out of stone including steatic and terracotta. But no terracotta human figure has been found from this level.

The Chalcolithic culture continued down to the 7th century B.C. when it was succeeded by iron age cultural remains. The iron age in Bihar can be divided into two phases - the Early phase and the Later phase. In the former, the art pieces that

have survived are in the form of clay figurines which have been found from different sites in Patna such as Bulandibagh, Kumrahar, Mahavirghat and Sadar Gali etc. Special mentions may be made of terracotta male figurine from Mahavirghat<sup>8</sup> in which legs are like two vertical lines, and arms are represented without the indication of elbows. The figurine of snake goddesses<sup>9</sup> and Nigamasa<sup>10</sup> from Bulandibagh were essentially cult objects. Among other terracotta animal figurines, the most notable are those of elephant, dog and ram. Among birds, dove and cock are represented which are similar to the Harappan type in technique and style. The representation of cock probably appears for the first time.

The K. P. Jayaswal Research Institute conducted excavations in four isolated parts of the city area of Patna, viz. Mahavirghat, Shah Kamal Road, Begam Ki Haveli and Government press playground in the year 1955-56. Excavations at these sites on the basis of total cultural components revealed three cultural periods at Pataliputra. Period I has been dated in c. 600 B.C. to 150 B.C. Four human figurines discovered from the lower level of period I were hand-modelled and evinced poor workmanship<sup>11</sup>. Most important among them is a standing male figure with stretched leg held slightly apart. The nostrils have been shown by two holes and mouth by a small horizontal cut near the chin.

The right hand is held across the chest and the left arm and leg are completely



broken. Fingers of hands and legs have been indicated by notches and impressed ringlets stand for eyes, nipples and navel portion. The other three are also standing male figurines. Two of the figurines have animal like face.<sup>12</sup> The face of another figure is like snout.<sup>13</sup> This figure is holding both the arms in his lap. The circlets are representing the eyes, breasts and the navel portion.

Pataliputra excavations of the years 1955-56 yielded a number of terracotta animal figurines. The animal figurines from period I were hand-made and were usually impressed in the circlets and incised lines.<sup>14</sup> On the whole, the figurines discovered from the earliest level indicated the archaic style and displayed lack of imagination of the artists in the art of clay modelling.

Buxar is another important site which has yielded terracotta figurines of early period. Excavations carried out in 1963-64 at Buxar revealed four phases of cultural deposits. Period I appears to be a pre-N.B.P. cultural phase. It was represented by red, black and grey potteries. In this period, the antiquities which came to light were of much interest. The important discovery of this period included six hand-made terracottas<sup>15</sup> of which four were animal figurines and two female figurines on the body of the animal figurines such as elephant, ram and horse, there were three horizontal strokes in yellow colour on the leg, back and tail of the animals.<sup>16</sup> Terracottas that have been reported from

Hastinapur from pre-N.B.P. level are much more crudely made and have no paintings on them. B.P. Sinha<sup>17</sup> has rightly placed these pre-N.B.P. terracottas figurines from Buxar in 600 B.C.

The two female figurines from Buxar are beautiful. The eyes are incised, nose pinched up, breasts full and rounded and one of them is wearing punched ear-lobes. The technique used though pre-mature, is quite successful, and the modelling shows good craftsmanship. The hand and the fingers of the broken female torso have very naturally made resting on the knee. The importance of these finds is that we have now positive idea about the art of making clay figurines in the period before 600 B.C. in the Central Gangetic valley.

Another notable sites of potential significance is Champa situated about two furlongs to the north of Nathnagar Railway station. Excavations carried out at this site by the Department of Ancient Indian History and Archaeology, Patna University have revealed six periods of cultural occupations of which period I is marked by a pre-N.B.P. level characterised by the occurrence of sherds of black and red ware. This is followed by the N.B.P. phase. The lowest level of the N.B.P. phase has yielded terracotta animal figurines such as elephant, bull, dog, Naga and Nagin with human body which are decorated with dots and incised lines. All these figurines from the lowest level are essentially hand-made specimens. But a significant change is noticed in the terracotta figurines unearthed



from the upper levels of the N.B.P. phase. The figurines comprising both human and animals have been made through moulds in the form of plaques depicting varied figures including Sakti type with weapons.

The terracotta figurines of the Mauryan period, generally larger in size, exhibit individuality in character and style. They have been discovered from most of the archaeological sites in Bihar. The terracottas of this period discovered from Pataliputra are of special interest. They show great advancement in their technique and style. Some specimens from Pataliputra are considered as outstanding and have been ranked as masterpieces. Some of the terracottas are thematically fascinating, while the rest of the terracottas are either aesthetically pleasing or reflect the attained excellence of technical perfection. The female figurines of this period deserve particular mention. Some of them, with bare breasts and dancing poses, are dynamic in character. They wear skirt like dress (Fig. 1 & 2). The facial expression of these delicately modelled figurines is interesting and their foreheads are exceedingly high with head sometimes surmounted by headgear rising in two lateral zones or sides. Another interesting specimen of this type has been found from regular excavation at Sonpur in Gaya district. The N.B.P. phase associated with iron age culture at Sonpur has yielded a few terracotta human figurines which could be assigned to the Mauryan period in terms of the cognate evidence of terracotta figurines as noted elsewhere in the N.B.P. phase.

Among the terracotta figurines, the most notable is the female dancing figure wearing undergarment and flouncing skirt.<sup>18</sup> Its slender body with broad hips and breasts exposed not only add to the beauty and charms of the figure but also reflects the delicate taste and fine skill of the artist of this period. The Sonpur dancing figure also shares some of the stylistic elements of the terracotta female dancing figure from Bulandibagh (Pataliputra) which is assigned to the Mauryan period.

Like many sites in the Gangetic valley, Lauriya Nandangarh has also yielded a large number of terracotta heads which are preserved in the Indian Museum, Calcutta.<sup>19</sup> The more remarkable finds assignable to the Mauryan period consists of a headless female figure and head of a boy both in the round. The realistically shaped face of the boy is characterised by a typically Mauryan child like innocence. The graceful treatment of the face with a sublime quality reminds us similar finds from various sites in Pataliputra. The female figure is superb example of the elegant and stylish ladies that are so characteristic of Mauryan terracottas. The general treatment of the figure reminds us of similar finds from Pataliputra. Besides the above terracotta figures the two famous terracotta heads from Bulandibagh also throw considerable light on the social life of the Mauryan people. The one is that of a laughing boy<sup>20</sup> and the other is of smiling girl.<sup>21</sup> Those two heads have their own significance. They show in a very realistic manner the inherent simplicity of juvenile mind. The smiling



boy (Fig.3) has two cornered head-dress covered by a cloth and fastened at the back. The hem of cloth shows its wavy edge around the back of the head. We notice another variety of head-dress in the head of smiling girl. Here the headgear has two lateral horns rising from the broad and high carves of the coiffure and is probably covered with cloth which appears to have been separately affixed. It may be mentioned that these two heads referred to above are the finest specimens of Indian terracotta art. In fact numerous such terracotta male and female figurines have been recovered from the ancient city of Pataliputra which suggest that they are the products of one workshop whose artists were expert in making terracotta objects. A terracotta female figurine (Fig.4) from Golakpur, Patna<sup>22</sup> is remarkable because of her close resemblance with the Didarganj Yakshani. She wears a Sari - like lower garment which is held by a girdle consisting of five strings and a neatly pleated scarf. One end of the scarf comes down to the waist while the other end with three tassels are represented near the thigh. It rests on the left shoulder. She wears necklace and a decorated band near the abdomen. Hands are missing but the trace of fly-whisk or chauri can be noticed on the right shoulder. In 1971 excavations in Chirand in a strata corresponding to the Mauryan period associated with fine N.B.P. shirds was found a double faced terracotta mask.<sup>23</sup> It must have been used in some festive gathering. The discovery of this object in the period 4th-3rd century B.C. is significant and provides archaeological

proof of dramatic performance at so early period. It is 35 cm in length and its breadth is 35.5 cm. Female part of the face is broken. The male face is dreadful. A crescent shaped ridge is made for hairs. Eyes are shown by bulging knob in a circle under the ridge-brows. Nose is abnormally large and so are the holes for nostrils. Once the mask is put-on, everything can be seen through these nostril-holes. Ears are large and cup shaped. Lips are shown open and apart and the teeth are shown protruding. Scorpion sting like moustaches are shown. Chin is also protruding. As a whole, the expression of the male face is ferocious.

From no other site, such mask has been reported. Various types of unique head-dress are noticed from the Buxar terracotta female figurines of the Mauryan period (Fig. 5, 6, and 7). A large number of terracotta heads have been represented with a flat and broad loop on the top, hollow in the middle with vertical lines impressed.<sup>24</sup> As a matter of fact Buxar terracottas of this period represent a special class. The figures are much better modelled, the head-dress and other decorations are much more prominent and numerous. They are entirely different from those that are commonly associated with the Mauryan period. In this connection, terracotta figurine sitting on stool is worth mentioning (Fig. 8).

No less remarkable is the execution of terracotta figurine of young drummer (Fig. 9). She is seen as playing on drum in a very high mood. Similarly the terracotta found from some sites of Bihar also re-



present pot-bellied persons in peculiar postures indicating humorous scenes<sup>25</sup>. (Fig. 10).

Besides, the figurines of elephants, horses, dogs and rams and birds have also been found exhibiting better workmanship than earlier examples.

During the Śuṅga and Kanva period there was a spectacular growth in the production of terracottas. They are not only greater in number but finer in artistic quality and varied in taste and temperament. The adoption of moulds also affected the art of the terracotta. Figures in the round are absent. The round figures of the Mauryan period gave place to composition in flat reliefs. The human figurines, sensitively modelled, are better regulated on more disciplined lines. Heavy coiffures, elaborate jewellery and dress on these figurines are more Indianized in character. The different limbs are well fashioned and bone joints have been indicated. We can see much similarity between the stone reliefs of Pataliputra, Bodh-Gaya and Bharhut and the clay art of different sites of Bihar. The terracottas of this period, *i.e.* of the second and first centuries B.C., represent a wide variety of religious and secular themes. The figure of *Sūrya*<sup>26</sup> depicted on a terracotta plaques make it obvious that religious terracottas were fashioned in more developed style. The plaque depicting the figure of *Sūrya* is round in shape. The deity is standing in the chariot drawn by four horses. This figure is very similar to the figure of Śuṅga period depicted on the Bodh-Gaya railing pillar,<sup>27</sup> showing the God

driven by four horses. Patna Museum possesses another important plaque of religious nature. It is a plaque depicting a male and a female standing close to each other (in mithuna pose) also lends support that various terracotta human figurines were made during this period.

Although religious themes were often depicted in terracotta plaques of this period their treatment was influenced by urban sophistication.

Most of the terracotta plaques discovered from the recent Champa excavations, belonging to the Śuṅga period (late N.B.P. phase) are religious in nature. Late N.B.P. phase at Champa have yielded terracotta plaques depicting a female goddess with weapons round the top of the plaque which may be placed in the Śuṅga period.<sup>28</sup> The figure appears to represent the mother-goddess Śakti or later Durgā who was armed with the characteristic weapons of the great gods. Similar more such figures have been found in course of the excavations. Another Champa plaque, which is broken, depicts full-blossomed lotus with its petals beautifully rendered. It is part of a bigger plaque and the lotus flower formed the pedestal. The deity seated on it might have been Lakṣmi. A winged male figure of this period is depicted on another plaque from Champa.

One of the most unique and distinguished types surviving at Lauriya Nandangarh from the Śuṅga period is that representing a winged male figure<sup>29</sup>, 'wearing a headgear, heavy garland, ear orna-



ments etc. Similar figures both male and female appear to be quite common in the Śunga period as already noted at Vaisali and Balirajgarh.

The Kusana terracottas have also been found from Kumrahar, Vaisali, Chirand, Sonpur, Hajipur and Belwa. The Kusana terracottas show that the clay modellers produced two types of figurines big and small. The artist did not use the mould which was so commonly employed by the Śunga artists. It seems that the mould was occasionally used, particularly for producing large figurines of which the busts were hand-modelled and the heads pressed out of mould and provided with tenons. The tenon in these heads is provided for inserting into the mortice hole of the body which was always produced separately. The method of preparing clay sculptures during the Kusana period can clearly be seen in a number of terracotta figurines from Belwa and other sites of Bihar. Majority of the terracotta figurines of the period from Bihar under review exhibit a crude workmanship chiefly because of sand particles and chipped husk which are mixed with clay as the tempering materials.

The modelling is also crude. The majority of figurines have large almond-shaped eyes with holes in the circular eyeballs, as well as in flat and heavy nose, half opened mouth, unnatural long ears and broad chest. The navel is indicated by a hole. The breasts also have punched holes indicating nipples. Foreign influence is also traceable on some of the terracotta figurines of this period.

Belwa has yielded a number of Kusana terracotta figurines which are now preserved in the Patna Museum, Patna. The three terracotta heads from Belwa are very interesting as they wear conical head-dress.<sup>30</sup> A head has typical foreign face with moustaches.<sup>31</sup> Another figure is shown in European fashion with pendant legs and wearing a skirt clinging to the body.<sup>32</sup> Another is a female figurine<sup>33</sup> with high and small breasts holding child (damaged) against her breast. Large cup-shaped depression for navel is clearly visible. She is seated on a cylindrical stool.

Religious figurines at Belwa are very few. The best and important specimen is a rectangular slab with seven figures<sup>34</sup> which is definitely the earliest representation of Saptamatrikas or seven mothers representing the Saktis or the endowed energies of the important familiar deities *viz.* Brahmani, Maheswari, Kaumari, Vaisnavi, Varahi, Indrani and Chamunda. The images of Saptamatrikas belonging to the Kusana period have been found near Mathura. The early Kusana images representing Saptamatrika are either standing or seated. They are shown as simple female figures without any distinguishing symbols or vehicles. Their individual traits are not yet depicted. The figures with slits for mouth, toes, necklaces and high headwear, large circle impressed for eyes etc. seems to be the earliest representation of the Saptamatrika figure so far discovered. Vestiges of bodies are slightly modelled.

It has no distinguishing symbols or vehicles, but on the basis of style it may



be dated in the Kusana period and not in the Gupta period as mentioned in the Patna Museum catalogue of Antiquities.<sup>35</sup>

The clay modellers art attained its acme of excellence in the Gupta period. Like the contemporary sculptures, the terracotta modellers with their long experience understanding and obviously with deep insight handled the clay figurines with great excellence. The complex technique of the earlier phases gave way to completely moulded one in the Gupta period. They are less sophisticated but more human. The Gupta terracottas are found to have been prepared mostly from the moulds, but traditional type also continued.

During this period the somewhat coarse and clumsy Kusana figures developed into things of fine finish and execution. The Kusana figures are heavy and their features are expressive of energy. But the Gupta figures are delicate and reposeful. Another characteristic feature of the Gupta terracotta figures is the wig-like hair on the head of some male figures. The modes of dressing the hair in the female figures are more varied. The ponderous ornaments of the Śunga-Kusana figurines became lean and delicate in the hands of the clay sculptors of the Gupta period. They reveal a high standard of skill and efficiency of baking and burning. The terracotta art of the period have been reported from Kumrahar (Pataliputra), Buxar, Vaisali, Belwa and Bodh Gaya. One of the finest and most artistic terracottas found from Kumrahar is the bust of a male figure having broad

forehead with ribbon going round and hair above the head raised upwards and matted in several groups. The eye-brows, eyes, nose and ears are prominently shown. The head is slightly bent to the left and the facial expression shows gravity. The figure as such is very artistic. A female head<sup>36</sup> from Kumrahar with half closed eyes is another significant example. Her hair is arranged in a honeycomb style tied at the back.

In the changed socio-economic environment during the Gupta period the terracotta art found a fresh emergence mainly as a part of the decorative scheme of the exterior walls of temples. The most important specimens of this period are the terracotta plaques, with figures in high relief probably made for the decoration of the outer faces of the temple walls. From Chausa a terracotta plaque depicting the Ramayana scene has been found which is preserved in the Patna Museum<sup>36</sup>. (Fig. 11).

Belwa has yielded only a few terracotta heads of the Gupta period. These heads are so charming that one wonders at the skill of the artist who fashioned them. They are interesting on account of their coiffure and head-dress.

Mention may be made of a head from Belwa which may be dated in 5th-6th century A.D. In the Patna Museum Catalogue<sup>38</sup> it is mentioned as male head but on close examination of the head it appears to be female head. The physiognomy which is characterised by a snub nose and thick lips, suggests that she is of negroid origin.



M. K. Dhavalikar is of the opinion that she may be a slave girl who may have been brought to India by some Iranian merchant or a dignitary in his retinue<sup>39</sup>. We have an excellent illustration of an Iranian chief surrounded by his consort and slaves of Negroid origin in Ajanta cave. The figure is modelled skilfully by the Indian artist to whom it must have been a rare experience. The hair is arranged in small wavy curls and the projection on the top of the head may perhaps be a bun. The right earlobe rendered rectangularly and left ovally are distended. A much similar terracotta head of the Gupta period discovered from Mathura is also preserved in Patna Museum<sup>40</sup>.

The last group consists of the Pala terracottas which have been found mainly from Antichak, Dharawat, Bodh Gaya, Nalanda and Bakraur.

The archaeological excavations conducted at Antichak have brought to light sufficiently large number of stone sculptures, terracotta plaques<sup>41</sup>, few bronze statues and a few stucco figurines. Terracottas of two distinct types have been obtained from the excavations of the site-terracotta figurines and terracotta plaques.

Nine successive seasons of excavation work by the Patna University revealed the remains of a large monastic site decorated with terracotta plaques in the walls of the two-tier circumambulatory paths. These terracotta plaques, portray a variety of subjects, religious and non-religious depicting in a vivid manner the different

types and classes of men and women, their activities, occupations, social life with all its joys and sorrows, their sports, pastimes, amusements and entertainments, religious faiths and beliefs as well as divine and semi-divine images, popular tales and other stories current among the common people, and the animals, birds, fish etc. familiar to them. The individual terracotta figurines from Antichak include the figurines of animals, birds and human beings. Among the animal figurines those of the dogs are comparatively more numerous than the figurines of other animals. Besides the figurines of dogs, the figurines of the elephants and horse, bulls and rams have also been found.

Antichak is mainly the site of a Buddhist establishment hence it is but natural to find that most of the plaques representing religious figures should have depicted Buddha, Bodhisattva and other minor Buddhist divinities in various postures and displaying various attitude. The plaques about thirty five to forty centimeters in height and about twenty five in width are arranged in a continuous row around the stupa shrine.

Buddha in one of the plaques, has been represented as seated in Vajrāsana in bhūmi sparśa-mudrā. A circular hollow behind his head is clearly noticeable<sup>42</sup>. The master figure again in another plaque is shown seated in Vajrāsana with begging bowls<sup>43</sup>, But there is no hollow behind the head of the Buddha. Scenes connected with the life of the Buddha have also been depicted in



three terracotta plaques. Mention may be made of a plaque representing the taming of the mad elephant Nalagiri by the Buddha<sup>44</sup>. The Buddha is shown standing turned three-fourth to the left with the miniature figure of an elephant near his feet. The animal is adoring the Master, who has placed his right palm a little above the head of the animal in a way as if he is blessing in turn. Devadatta, the cousin of the Buddha is also shown on the other side of the plaque.

The plaques also depict Bodhisattva Avalokiteśvara<sup>45</sup> and Mañjuśrī<sup>46</sup> (Fig. 12) and future Buddha Maitreya and Buddhist god of wealth Jambhala. Padmapāni Avalokiteśvara has been represented in three plaques. One of the plaques exhibits Lokeśvara seated in Vajrāsana, holding bowl in his right hand and a lotus by its stalk in the left. There is a highly interesting image of Mañjuśrī in the earth touching attitude by the left and the Vyākhyāna mudrā by the right hand. His special symbol, the book is placed on a lotus flower to his proper right. The figure is very beautifully depicted. Among the Buddhist goddess, Tārā<sup>47</sup> and Mārīchī have been found represented on the terracotta plaques from Antichak.

But what is more surprising is the representation of Brahmanical divinities having been assigned distinctive places in the scheme of decoration of the exterior walls of the Buddhist stupa shrine at Antichak. Boar incarnation of Lord Visnu, Ardhanarisvara and Hanumana are among the Brahmanical gods who have been in-

cluded in the religious figures represented on the plaques. It is possible that the Brahmanical deities found places on the body of the shrine because of their having been absorbed into the Buddhist fold of the Mahayana sect, and also because of the sincere efforts having been made for bringing about rapprochement and reconciliation between the members of the rival sects during the early medieval period.

There are also several female figures depicted on the terracotta plaques from Antichak, some of them having been shown in the act of dancing and playing on musical instruments. One of the plaques, is of considerable interest. It depicts a lady seated gracefully, the right leg placed on the left leg, with double bend in her body. Holding a mirror in her hand, she is looking at it appreciatively, while she is engaged in applying vermilion on the partition of her hair by the fingers of her raised right hand (Fig. 13). Roundish innocent face, well formed breasts and thin waist add greatly to the attractiveness of the female form. The beauty of the figure is further enhanced by the adornment of her body with a number of ornaments<sup>48</sup>.

These terracotta plaques are completely moulded and represented by broad chest, proportionately thin waist, well formed hands and legs, big eyes, broad mouth and broad forehead. A consistent style for the terracotta seems to suggest that they were the work of an established school of workmen, but the style is clearly different from that of stone sculptures which have been found at Antichak being more animated



and freely executed. They are the earliest sculptural remains from Antichak.

The terracotta plaques from Vikramaśīla Mahāvihāra however, bear family likeness with the Paharpur terracotta plaques. The monastery of Somapur, the remains of which have been found at Paharpur in north Bengal (now in Bangladesh) was found and embellished during the reign period of the great Pala ruler Dharmapala and as such the terracotta plaques from Paharpur have been assigned to the second half of the 8th century A.D. The Vikramaśīla terracotta plaques can, therefore, also be dated around the same period which too was founded by the Pala ruler Dharmapala.

The terracotta art of Dharawat is mainly represented by plaques depicting figures of the Buddha and the Bodhisattvas<sup>49</sup>. Some of the plaques also carry inscriptions in Pala characters which further affirm that they belong to Pala period. Several terracotta plaques depicting figures of the Buddha in bhumisparsa mudra have been discovered at Bakraur just to the east ward of Bodh Gaya across the Lilajan or Niranjana river. Similar terracotta plaques have also been found at Nalanda and Bodh Gaya.

Thus, the aforesaid survey of ancient terracottas in Bihar right from the Neolithic period down to the early medieval period around 11th-12th century. A.D. has brought into focus certain features or elements peculiar to the terracotta forms of this region. The earliest terracottas in Bihar, like those in the north-west comprising the

presentday provinces in Pakistan<sup>50</sup>, have been known from the Neolithic era dating to 2000 B.C. or a little earlier. The notable neolithic sites which have provided evidence of terracotta specimens include the excavated sites of Chirand and Chechar in north Bihar and Taradih, Maner and Senuwar in south Bihar plains.

The Neolithic phase, as known from Chirand and Senuwar, is divisible into two phases with the earlier showing a metal free stage of pure neolithic character, while the latter shows the continuation of basic traits of the earlier phase with an addition of copper metal, which, so to say, are essentially Neolithic-Chalcolithic in character. There is no C<sup>14</sup> for the earlier phase but the latter phase of Neolithic-Chalcolithic on the basis of C.14 determination has been dated around 1800 B.C. In the light of this date, the beginning of the early phase is placed around 2000 B.C. or a little earlier. However, the terracotta specimens of the Neolithic period, as discussed earlier, include female and animal figurines, as well as birds and snake figurines. All these early terracotta figurines are generally crudely modelled and have rightly been categorised as archaic in type.

The Neolithic phase in Bihar, as elsewhere in India, is followed by the Chalcolithic phase dating between 1200 B.C. to 7th-6th century B.C. The Chalcolithic phase again is divisible into two phases with the earlier representing a pure Chalcolithic phase while the latter shows the continuation of the basic traits of the



earlier phase with an addition of iron pieces in the form of iron ore and slags alone with fewer iron objects. The terracotta specimen of this period, as known from a number of sites such as Chirand, Chechar, Sonpur, Oriup, Taradih, Maner, Senuwar and Ramchaura in Hazipur include human and animal figurines including bull figurines with the hump are generally characterized by plump physiognomy and stumpy legs and lack any kind of decorative treatment. It may, therefore, be said that the terracotta figurines of the Neolithic and Chalcolithic periods show the early beginning of hand-modelling in the making of terracotta figurines and seem to cater to the taste of the village-folk of the Neolithic and Chalcolithic culture complexes.

The Chalcolithic phase, in turn, is followed by the Iron Age Culture associated with the N.B.P. ware generally dated between 6th-5th century to 1st century B.C. The N.B.P.W. phase covering the dynastic periods of pre-Mauryan, Mauryan and Śunga periods are marked by the growth of cities and towns and the wide variety of terracotta figurines that have come to light from numerous N.B.P.W. sites seem to cater to the taste of the urban folk. The N.B.P.W. phase in Bihar is divisible into early and late N.B.P.W. phases with the former representing a pre-brick phase devoid of any kind of brick-built structure, while the latter is marked by the use of burnt bricks in the construction of brick-built walls forming part of room-like structure.

Interestingly enough, the terracotta figurines associated with the N.B.P.W. levels are marked by two distinctive stylistic trends which are best reflected in the terracotta figurines of the Mauryan and Śunga periods. It may, however, be pointed out in this connection that the lower most levels of the N.B.P.W. phase at sites like Mahavirghat, Shah Kamal road, Begum-ki-Haveli and Government press playground in the Patna City area, Buxar and Champa in Bhagalpur town have revealed a small group of terracotta figurines consisting of male and female figurines as well as a number of terracotta animal figurines such as elephant, bull, dog, ram and *naga* and *nagin* figurines with human body which have been dated stratigraphically to circa 6th-5th century B.C. Most of the terracotta figurines of this group are hand-modelled and show fine workmanship with the exception of a few male figurines from Patna City, which, though hand-modelled, evince poor workmanship. However, the terracotta figurines from the lower levels of the N.B.P.W. phase, though hand-modelled, are marked by some improvement in execution especially in the treatment of facial features and other decorative elements as compared to the terracotta figurines of the Neolithic and Chalcolithic periods.

The terracotta specimens of the Mauryan period datable to circa 320-200 B.C. consist mainly of large figures of dancing girls from Pataliputra and Sonpur, female figurines with elaborate hair styles from Buxar and animal figurines



from Pataliputra, Vaisali and Buxar showing applique designs and punch-marked and incised circlets. The large figurines of dancing girls are the finest examples of free standing figures moulded in the round and bear close affinity at least in stylistic terms with those of the free standing rounded figures of *Yaksas* and *Yaksis* in stone. It has, however, been suggested by Devangana Desai that Mauryan terracotta art reveals foreign influence more particularly the Hellenistic influence, in a number of beautiful dancing girl terracottas of Pataliputra and Sonpur. The facial features, drapery and scarf like head-dresses of these figures, according to Desai, are reminiscent of the Greek terracottas of Tanagra of third century B.C. The foreign influence, according to Desai, is also discernible in the terracottas of Buxar representing fashionable ladies with elongated foreign facial features and elaborate hair styles. Dr. B. P. Sinha,<sup>52</sup> however, is of the view that the Mauryan art including the terracotta art do not betray any foreign influence and the facial features of the dancing girls and also that of the fashionable ladies from Buxar are completely Indian. And, the drapery and scarf like head dresses of these figures probably bear superficial resemblance to Greek parallels which may have been drawn from West-Asian examples. It may, therefore, be said as suggested by Sinha that foreign influence on Mauryan stone art including the terracotta art to any appreciable degree is not proved so far.

The terracotta specimens of the Śunga

period dating between 2nd Century B.C. to the close of the 1st Century B.C. consist mainly of miniature terracotta plaques depicting male and female deities and narratives connected with the popular stories and Jataka tales. The period in question is marked by a spectacular growth of terracottas with a number of centres specializing in the production of terracottas. The notable centres wherefrom Śunga terracotta plaques have been recovered in good numbers include the sites of Champa, Lauria Nandangarh, Pataliputra, Vaisali, Balirajgarh, Chirand etc. Somehow, a detailed study has not been made of terracotta plaques produced at each centre keeping in view the characteristic features noted at each centre or site. Howsoever, the notable male and female deities that have been depicted in terracotta plaques include the female goddess Sakti with Ayudhas or weapons round the top of the plaque from Champa, the Sun god or Surya from Chirand. Sri Lakshmi or the goddess of prosperity from Lauria Nandangarh and the winged male deities from Champa Vaishali, Balirajgarh and Lauriya Nandangarh. The female goddesses, however, are beautifully bedecked and richly be-jeweled elaborate hair styles which indicate that their treatment was influenced by urban sophistication. A special feature of Śunga terracotta art is that moulds were used in the making of terracotta plaques which facilitated the rendering of exhaustive details of dress, ornament, coiffure and so forth in the plaques. There is, however, a complete absence of figures in the round as noted in the Mauryan period and instead



recourse was taken to composition in flat reliefs.

The terracotta specimens of Kushan period dated to circa 50-300 A.D. have been discovered from a number of sites such as Kumrahar in Pataliputra, Chirand, Sonpur, Ramchaura in Hazipur and Belwa. The terracottas of this period are represented by big and small sized male and female figurines of which the bigger ones show the use of hand-modelling in the rendering of busts, but the heads of the figurines have been pressed out of moulds. Curiously enough the Kushan terracotta figurines in general exhibit crude workmanship in so far as modelling is concerned. And a possible reason cited for this poor workmanship is that the clay used in the making of figurines is mixed with sand particles and chipped husk as tempering material. Of special interest among the figurines are the terracotta heads from Belwa with the one showing a conical head-dress and the other shows a typical foreign face with moustache. Another figure of interest is a female figure holding a child against her breast and is seen seated on a stool. But somehow examples of moulded plaques as noted in the Śunga period and those produced by double-mould technique have not been known from this region, though they constitute the two distinctive features of Kusana terracottas. Besides, figures of male and female deities have not been known so far from Bihar with the exception of the evidence of *Saptamatṛikas* from Belwa.

The terracottas of the Gupta period dated to circa 300-550 A.D. have been

reported from sites such as Kumrahar (Pataliputra), Buxar, Vaisali, Belwa and Bodh-Gaya comprising mainly the male and female figurines. The most notable examples of the period include the bust of a male figure and a female head from Belwa. Most of the figurines have been prepared from moulds, though the traditional types characterised by hand-modelling also continue in this period. Another notable example of the period is a terracotta plaque from Chausa showing the representation of Ramayan scene. It is quite likely that such plaques may have been made probably for the decoration of the outer faces of the temples. It may, therefore, be said that Gupta terracottas are represented by two distinctive types viz. the moulded miniature figurines and the bigger sized figures and plaques. The miniature moulded figurines may have been used for household decoration or religious purposes, while the bigger sized figures and plaques may have been used for the decorations of temples and monasteries.

The terracottas of Pala period dated to circa 765-1175 A.D. have been reported from the following sites such as Antichak, Dharawat, Bodh-Gaya, Nalanda and Bakraur near Bodh-Gaya. The Pala terracottas like those of the Gupta period are represented mainly by two types consisting of miniature terracotta figurines and terracotta plaques. The most impressive examples of these two types of terracottas have been discovered through the excavations conducted at the monastic and stupa



shrine sites at Antichak in Bhagalpur district. The more numerous, however, are the terracotta plaques which have been used for the decoration of the walls of the two-tier circumambulatory paths of the stupa shrine. The miniature terracotta figurines include the figurines of animals, birds and human being, though more numerous among the animals are the figurines of dogs. Besides, figurines of elephant, horse, bull and ram have also been found. The terracotta plaques used in the decoration of

the walls of the Stupa shrine portray a variety of subjects of religious and non-religious character. Interestingly enough, in the scheme of decoration of the exterior walls of the Stupa shrine, both the Brahmanical and Buddhist deities have been assigned distinctive places which in a way indicate that efforts had been made to bring about rapprochement and reconciliation between the members of the rival sects during the Pala period.

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## THE ART OF TERRACOTTA IN N. E. INDIA WITH SPECIAL REFERENCE TO ASSAM - A SURVEY

R. D. Choudhury

The North East India is a vast region of India to the east of Bangladesh. It is encircled by the foreign countries like Burma, China, Bhutan and Bangladesh. There is a narrow passage linking the Brahmaputra valley of this region with the main land of India. The whole East Pakistan was very much a part of India in the pre-independence period and through this part of the country the culture travelled to North-East India from the other part of the country, particularly from the Eastern India, Central India and Northern India. The river Brahmaputra played a major role in trade and commerce between the N. E. India and rest of the country. North East India had a deep rooted cultural link with rest of India and also with the South-East Asiatic countries.

The activities of the baked clay sculptures making was confined to the plains of the Brahmaputra valley of Assam. Except Assam, Meghalaya, Arunachal Pradesh and Tripura, the rest of the states, which are mostly hill states do not have much evidence of the tradition of the

terracotta art, as we shall show. However, plains of these Hill States did witness the activities of the potters and clay sculpture artists.

### Assam :

The earliest terracotta figures in the North East India come from Daparvatiā, near Tezpur. R. D. Banerjee<sup>1</sup> discovered a few terracotta sculptures showing human figurines at the place as early as 1926. These terracotta sculptures were found while clearing the jungle of the ruined temple site and not found in an excavation. Out of these plaques containing possibly the human figurine, he has illustrated only one plaque, containing one seated human figure. This is a seated cross-legged figure keeping the left hand in *Bhumisparśa mudrā*. The right hand of the figure seems to be holding something, which is not very clear (rosary ?) in the photograph published by Banerjee<sup>2</sup>. It is a torso, so we have no idea about the face and head of the figure. The chest of this male figure is broad, while the waist is proportionately thin. R. D. Banerjee<sup>3</sup> likes to place it in 6th century



by all means and it cannot be placed in a later period, which seems to be correct. The standing beautiful temple stone *dvāra* at the site also belongs to the same period. His remark that the style of the representation of these figurines shows a very close connection between mediaeval art of Bengal and Assam and these are of the same type as those discovered at Birat and Paharpur in Bangladesh, it appears, holds good. For the style of the seated figure has close affinity with that of ours.

In the Daparvatīā village, not far from the ruined temple site, two terracotta plaques were discovered by S. C. Bhattacharya few years back and the same have been deposited in the Assam State Museum (A.S.M.)<sup>4</sup>. The first plaque measuring (31 x 25 cms) shows two female figures riding on two elephants facing opposite direction<sup>5</sup>. As the hind part of the two elephants touch each other with heavy pressure, so the backs of the elephant riding female figures too touch each other. The tails of the elephants are not seen due to the effect of the pressure put by the elephants backwards. Each of the female riders places one of their hands on their waists, while the other hand rises above the head in an attractive pose. The upper portion of the breast of the figure to the left is damaged, while the face of the other figure is mutilated. Bhattacharya's identification it as Gajalakshmi is not tenable<sup>6</sup>. For, the concept of Gajalakshmi not depicted in this sculpture. It is a very peculiar sculpture not commonly met with. The second plaque depicts a human figure.

Its upper portion is mutilated leaving only the lower part of the abdomen. The number of hands of the figure is not clearly visible. In the same village some terracotta figurines depicting animals (Tiger and Monky) and also human being in a mutilated condition were noticed by us some years back. These broken figurines were kept under temporary sheds for worship by the local villagers. This group of terracotta sculptures from Daparvatīā is in high relief and from stylistic consideration they may be placed in 6th - 7th century A.D. .

In the Assam State Museum, three terracotta sculptures are on display. There were collected long back from Yogījān.<sup>7</sup> The first plaque shows a male human figure in *ālīdhāsana*, (half keeling posture) with in *añjalihasta* pose. The figure is depicted with a bow and a quiver with arrows on its back. The bow is seen behind the figure. It appears that the warrior has sought the permission or blessings of some one or surrendered to some one. The second plaque carries two male figures. One figure is shown as seated, while the other stands to the left of the seated figure to touch the head gear of the other. The last figure represents Gajalakshmi.

Of late the Directorate of Archaeology, Assam has exposed the *adhiṣṭhāna* and *bhitti* portions of as many as 9 (nine) ruined brick temples at Nanāth, meaning, nine Śiva lingas, or Yogīs near Hozāi in Nagaon District<sup>8</sup>. Also at a little distance at Kendugurī the *Adhiṣṭhāna* of another



brick temple has been exposed by the same department and preserved. The discovery of these ruined temples were made long back. But these were not systematically excavated and jungle and the heaps of the brick bats were not cleared. So, the potentiality of the sites were not known to the scholars. The discovery and publication on them have given information to the art historians relating to the activities of construction of brick temple decorated by beautifully made terracotta sculptures datable to post Gupta period.

At Nanāth the ruined temples enshrining each a Śivaliṅga of which the upper portions including the Śikharas are broken and fallen down, are in two rows. Few temples are in a very bad state of preservation, while few do not bear any terracotta sculpture on the bhittis. The first temple on its bhitti has 98 devakoṣṭhas in a row on three sides (not the front)<sup>9</sup>. "Each of those devakoṣṭhas held a terracotta plaque for the decoration of the temple. Each devakoṣṭha measures 27 x 27cms. The measurement of each plaque is 24 x 26 cms. The terracotta plaques are intact only in 29 devakoṣṭhas. Rest of the terracotta plaques that were stuck into the devakoṣṭhas are either lifted by antique hunters or lost in the process of natural calamities. Some of the fallen plaques are preserved in the zonal office of the Archaeology Department at Hozai"<sup>10</sup>.

The plaques in question show human figures, birds, animals, flower motifs, grotesques etc. The plaque also carry the figure of Sūrya and Narasiṃha avatār of

viṣṇu. One plaque also shows the elephant and lion i.e., Gaja-vyāla motif, which is very common in the art of Assam. The figures of Sūrya and Narasiṃha mentioned above are in sthānaka attitude. One plaque shows the episode of Krishna's Arjuna bhañjana. "Plaques showing bull elephant, mother and child etc. are also found"<sup>11</sup>.

The first temple is in the left row of temples. The other ruined temples in this row do not have terracotta plaque. The second row carries 43 plaques in the devakoṣṭhas. In all there are 64 devakoṣṭhas on bhittis of this temple. Some of the devakoṣṭhas are without plaque. As in the former case, here also, we find representations of divinities, such as, varāhavatāra, sūrya, Uma-Maheśvara, Kārttikeya, dancing female and other human figures, animal figures, such as, elephant, lion and horse, flower motif, kīrttimukha, Kalpavṛksha motif etc.<sup>12</sup>.

The zonal office of the Archaeology Deptt. at Hozāi has preserved 27 pieces of terracotta collected from Nanāth discovered while clearing the debries. All these pieces are of the same size and were fixed in the devakoṣṭhas possibly of the first left and second right temples, which bear terracotta plaque in the devakoṣṭhas. These are comparatively in a better state of preservation, as they were under the earth or the debris without the effect of sunlight and rain etc. These plaques also like the earlier ones include animals, mythical figures' motifs, Ganesh, female devotee (?) and flower motifs. One plaque also depicts a fish, which is not very common. It may also be



taken as the *matsyāvatāra* of *viṣṇu*, as we have the figurines of other *avatāras* of *viṣṇu* in the Nanāth sculptures<sup>13</sup>. At Kenduguri<sup>14</sup>, close to the Nanāth site, similar three terracotta plaques depicting a human figure, a bannana tree, and a bird, were noticed in weathered condition. But after the preservation of this brick temple, these plaques are not seen there.

After verification, it is found that some plaques have duplications. Few earthen moulds of some plaques have also been discovered along with the sculptures. This proves that the plaques were prepared at the site itself.<sup>15</sup>

Stylistically, the Nanāth terracotta appears to be of slightly later period. The way the plaques are found decorated in the *devakoṣṭhas*, one recalls the style of the Pāhārpur Buddhist *stūpa*, now in Bangladesh. Nanāth sculptures, therefore, may be placed in 8th/9th century and not earlier.

Nanāth ruined brick temples amply prove that even offer the Gupta period, the erection of brick temples was popular in North East India, as in some parts of the country. The brick temple at Bhitargāon in central India is famous for the terracotta sculptures stuck into the walls of it. Later on, the tradition was found at Pāhārpur and Manāmati now in Bangladesh. The tradition was continued to as far east as Nanāth, Daparvatīā ruined temple, which belong to c. 6th century, Mikirati, where remains of a garbhagrha was noticed and at Badgaṅgā where trace of the plinth of

a temple was noticed (which was seen by us around 1969). But now, remnants of Badgaṅgā temple are completely wiped out.

The A.S.M. houses three very good pieces of terracotta sculpture, collected from Kukurmutā (now Chenikuthi), Guwahati. The first plaque shows three female figures in *tribhaṅga sthānaka* attitude. The central one is taller than the other two. It appears, the shorter two figures are attending upon the middle taller female figure. The figures have each two arms and wear usual dress and ornaments. All the three figures wear *sāri* as their lower drapary. It is not very clear, if the hands of the central figure is busy in fixing its hairknot or they are in a dancing pose. The legs of this (middle) figure appears to be in a dancing posture. However, if the hands can be taken as busy in fixing the hair not of the head of the taller central figure, then it can be taken as figure of some aristocratic lady with her attendants. The figures are high breasted and of cylindrical body shape. The upper and lower borders of the plaque, which is well decked, bear each a lotus petal design. "The middle figure commands a fair feminine beauty".<sup>15</sup>

The second plaque is equally very interesting. Here the male teacher or *Guru* is shown as seated displaying *vākhyānamudrā* with his two hands and his desciple, a slady is made to dance before him. The accompanist, a male *mṛidaṅga* or *pākhawāj* player is shown as playing his instrument to the tune of the dance. The



face of the male figure, representing the dance teacher is mutilated.

The third plaque shows a emaciated male figure with exposed veins and ribs in dancing posture. The two armed figure hold a **Kamandalu** and a **tridaṇḍa**. The lotus patel design seen on the upper and lower borders of the earlier two plaques are not seen in this case. Stylistically, the well decked, refined and well decorated plaques of terracotta may belong to 11th and 12th century, if not earlier<sup>16</sup>. These three terracotta sculptures are devoid of any folk element. They must have been the product of some expert professional artist. The similar style is also traced in some terracotta sculptures from Guwahati, described below.

About five years back or so, while digging for the construction of an indoor stadium in the campus of the residence of the Principal of the Cotton College, Guwahati, some old construction was discovered. Along with potteries and some other objects (?) a number of terracotta plaques were found. The excavation was conducted by the Department of Archaeology, Assam, under Dr. N. P. Choudhury. Now the discovered potteries, brick bats and the terracotta plaques are kept in the custody of the Anthropology Deptt. of the Cotton College.

In all 12 plaques could be seen in the Deptt. of the Anthropology. All the plaques are of very high order but they are sadly mutilated. The first one shows the figure of **Indrānī** riding on the back of **Airāvata**,

who is shown as moving fast. The *āyudhas* held by the hands of the goddess are not clear. The goddess is flanked by two flying **Apsarās**. Unfortunately, the lower portion including the fore legs and the trunk of **Airāvata** of the plaque is broken and missing. The second plaque shows of figure of flying **Vidyādhara**. This is the only plaque in the group which is in almost without mutilation except that it is broken in the middle horizontally into two pieces. However, the excavator very nicely joined them together restoring to their original positions. The two armed **vidyādhara** who is hovering over the sky is seen holding an object what looks like a **khadga** or a short **daṇḍa**, with its right hand. The left hand is seen carrying an object looking like a small full bloomed lotus without stalk. The **Kuṇḍala** and **kiriṭa mukuṭa** worn by the **Vidyādhara** are very clearly seen. The lower drapery, which is beautifully designed, is very nicely depicted. The *uttareya*, which is beautifully done, worn by this heavenly nymph, is seen flying giving an effect of the flying posture of the figure in the sky. Another mutilated plaque, which is the exact copy of the earlier one showing a figure of **Vidyādhara** is in the group. The head of the figure and so also the lower right corner of the plaque are missing.

The fourth plaque depicts the beautifully done figure of **Kaumārī** riding on a peacock. The deity's attendant, possibly an **Apsarā** is seen following her in a flying posture in the sky. The face of the peacock along with the portion of the



plaque is broken and so also the left corner of the plaque. The fifth and sixth plaques depict the same theme. Here a female figure is made to sit on a stool and place some unidentified object with its two hands on a **Śivaliṅga** kept in the front. Possibly, it is the figure of **Pārvatī** worshipping a **Śivaliṅga**. The head of the figure of the fifth plaque is missing, while the **Śivaliṅga** of the sixth plaque is missing. The sitting posture of both the figures of the plaques are same. I think, they were made from the same mould.

The seventh plaque carries the legs of a deity and her attendant. The upper portions of both the figures are broken. The eighth plaque shows a torso of a seated female figure in **dhyānāsana**. The ninth and tenth plaques depict a male and female dancing figures respectively. The head and the upper portion of the male figure and the portion below the waist of the female figure are missing. The next plaque possibly carries a female standing figure. The plaque is sadly broken into two pieces in the waist level of the figure. The right arm and face of the figure are mutilated. A miniature attending figure is seen below. The last i.e. twelfth plaque shows the upper portion of a scene only.

The trace of a **mukuta** of some deity can be noticed and two beautifully done lotus (?) are seen in the upper corners of the plaque, which are normally occupied by figures of **Vidyādhara**s. The lower portion of it is completely broken and missing.

All the plaques show a design of a row of lotus petals in the lower and upper borders of the plaques, as we have already seen in the three **Kukurmutā** sculptures described above. This group of sculpture, in execution, has striking similarity with those from **Kukurmutā** sculptures preserved in A.S.M.

The A.S.M. houses two terracotta<sup>17</sup> votive tablets (17 x 11 cms). These were found in Guwahati long back. The first tablet punched on a terracotta plaque, shows Buddha in **bhumisparśamudrā**. The rim of the tablet which is raised is mutilated. The symbols of **stūpas** are nicely depicted on either side of Buddha. Below the figure the inscription on well known **Mahayāna** creed in the character of 11 century is seen.<sup>18</sup> The second tablet (23 x 10 cms) also carries the same theme in the same way. The figure of the seated Buddha and symbol of the **stūpas** are depicted in the same way. But the inscription commonly found is absent here. It appears that this tablet is a part of a bigger terracotta plaque containing more stamped Buddha figures. These were made for the spread of Buddhism through traders and others in the line.

B.B. Dey, Guwahati University, a few years back handed over a terracotta plaque which is a broken piece collected from **Śrīsūrya pāhār** to A.S.M. The plaque (33 x 19 cms) has an outward band. It must have been fixed on the basement of some **Stūpa** round in shape. The plaque contains the miniature figures of Buddha in two tiers.



The first tier depicts four figures, while the second one shows other four in a lower level. In fact the plaque is a broken part of bigger plaque.

All the figures are stamped and in **Bhumisparśa mudrā** depicted in one and the same style. The lower part of the sculpture is broken. This type of terracotta plaques bearing the figures of Buddha were very popular in Bengal-Bihar region, (including the present Bangladesh).<sup>19</sup> The first tablet described above bear striking similarity with the votive tablets discovered in greater Bengal and Bihar region, which are found in large numbers. The plaque from Sabhar illustrated by Bhattasali, is very close to our plaque carrying two rows of Buddha figures described above.<sup>20</sup>

The Āmbārī excavation has releaved a good number of miniature terracotta **Śivaliṅga**<sup>21</sup> during the last phase of excavation. Amongst large number of stone sculptures the discovery of large number of earthen miniature **Śivaliṅga** in the heart of Guwahati is a significant event. All these discoveries lead us to prove that Āmbārī was a great art workshop or art production centre. The clay **Śivaliṅgas** are in the custody of the Directorate of Archaeology.

The first excavation exposed a few terracotta objects, which are being preserved in the A.S.M. Those were already published<sup>22</sup> by Sipra sen and T. C. Sharma. They have also given three illustrations of the terracotta (which are not very good)

fragmentary pieces *i.e.*, upper part of a miniature figure of **Gaṇesh** with a beautiful **śiracakra**. The figure is sadly mutilated. Their illustration shows some more decorative objects. But they have not included three important objects. These are a miniature dancing female figure (torso) of which the right arm and right leg are broken, the body a miniature female figure (one breast mutilated) and a **Śivaliṅga** like object of bigger size, of which the identity is not clear. The dancing female figure and the body portion of the female figure are excellent work of art. Both the pieces of art work are beautifully ornamented. The body portion of the female figure proves that it was a holo sculpture and prepared in the technique of the clay sculptures of **Gaṅgā** and **Jamunā** from Ahichchatra now being displayed in the National Museum. These are certainly much developed work of art and can be placed in *c.* 10 - 11th century. All these pieces of broken plaques are preserved in Assam State Museum.

Recently, the A.S.I. has conducted an excavation at **Śūrya Pāhār**, near the site of rock-cut images and the votive **stupas**. It has thrown a new light. It has exposed the plan of a ruined structure. I had visited the site when the excavation was going on. I was under the impression that the construction belonged to some ruined temple. I had also examined the broken terracotta sculptures found in the excavation. But due to mutilated condition these could not be identified. The A.S.I. authorities, like to attribute the site to a Buddhist **stūpa** and not temple of 7th - 8th



century. The excavation conducted this year has supported this.

Very recently I visited the circle office of A.S.I. Guwahati and enquired about the discovered terracotta objects. But I was only shown three fragmentary pieces of terracotta sculptures. The rest of the terracotta sculptures, which are locked in a room, could not be shown to me for obvious reason.<sup>23</sup>

Out of these three sculptures, the 1st one (28 x 10½ cms) shows the head of Buddha in a circle. The second (29 x 29 cms) one represents an eight handed male deity. The head and legs are missing. The āyudhas held by the deity cannot be identified because of weathering effect and mutilated condition of the icon. The images was found on the surface outside the trench. Therefore, it may be of slightly later period, but certainly of the Pre-Ahom or Koch period. It is not well backed, so is little blakish. The last piece of terracotta (34 x 23 cms) carries the figure of a *Nayikā*. It is broken into two pieces and not joined. All these pieces of terracotta plaques are only fragmentary pieces. The first and third one are well backed. These may be placed possibly around 6th century. Of course, the official published report along with the details of the stratigraphical description will only give the correct picture of their antiquity. The report is yet to be published.

Some years back a few terracotta plaques were collected from the residence of Debes Das of Marnoi for the A.S.M. "The

first plaque which is half broken shows a seated female figure which is depicted in profile. The hands of the figures seems to be empty. The face of the figure is mutilated. The second plaque depicts two male figures seated very close, one behind the other. It is also mutilated. Both the sculptures with the figures are in high relief. On stylistic consideration, these terracotta plaques may be dated to a period slightly later than that of the Pāhārpur terracotta sculptures. The other three broken pieces of sculpture of the same group bear some geometrical designs."<sup>24</sup>

In the Ahom period also this art was practised. We find the decorated temples of the Brahmaputra valley of Assam used for the decoration of the temples belonging to the Ahom period. However, all most all the temples are bedecked with the stone plaques in the *devakoṣṭhas*. In case of the Koch monument also this practice was very popular.

But the example of terracotta art of this period are not wanting. The A.S.M. has a few terracotta sculptures in its possession belonging to this period. Total number of these sculpture is only 10 (ten) excluding ones from Hirāpārā Śiva temple, Marnoi. The first plaque shows a crude standing human figure. It was collected from Siddeśwarī temple, Śoālkuchi. This two armed figure looks like a *duārapāla* (37 x 35 cms). The second plaque also depicts an exactly similar figure. The plaque (17 x 37 cms) shows a lion, an elephant mounted by some royal figure (?) and a horse mounted by a soldier (?) All these



animals are seen moving towards front. Some flower designs are also seen. The panel (broken) is prepared out of mould, so it has become an attractive piece of art. It was collected from Āmbārī. The fourth one is a small broken piece of work of art prepared out of mould showing a moving horse with the rider, possibly a soldier (?). It is a good art work but sadly broken. This is from Sibsagar (33 x 18 cm).

The fifth plaque shows a broken four armed image of viṣṇu. The lower part, below the waist is broken and missing (14 x 16 cm). The remaining five except for the last two plaques depict floral motifs and they are sadly mutilated. These must have been cast work (20 x 24 cms.). The plaques showing lion, elephant and horse are good example of art. They are sculptured in Mughal style (14 x 21 cms). The last but one is a beautiful panel depicting a fighting scene (13 x 18 cms). It is also a cast and sculptured in Mughal technique and style. The last one is from Siddeśwarī devālaya (14 x 17 cms). It is the emaciated figure of **Bhṛīṅgi** executed exactly in the Kukurmutā style having border design of lotus petal.

A few cast of terracotta plaques from the original ones from Joysāgar, Sibsagar are preserved in A.S.M. These were presented by Sri Bhuban Handique of Sibsagar. A few similar casts are also seen in the Cottage Industry Museum, Guwahati. The brick temple at Kāmākhyā, just behind the Trust Board office building, is now in almost complete ruins. Possibly, it will be wiped out as soon as the

remaining portion falls down to the ground. It was once a beautiful monument decorated by tastefully done terracotta plaques. But most of the plaques were fallen down, broken and lost due to the negligence of the authorities. Though the building was only about one hundred year old, yet there were strong reason to protect this monument by the authorities.

The Ghanashyam Dol, Joysagar in upper Assam is another monument which is decorated by various types of tiles of terracotta. It is a docālā type of monument of late style. It is said that artist Ghanashyām Khanikar, a royal artist, built this monument and he resided here. It is also said that he was a Muslim artist.

It is dated in 17th century. This centrally protected monument needs more attention. Already many plaques fixed on the outer walls of the building have fallen down and got damaged. Many of them are missing. The plaques carries various types of floral, geometrical, creeper designs and also human and animal figures etc.

In Nalbari district, Billeśvar devalaya, Satrar Dol at Āthghariā and in Barpeta district at Sundridia Satra have this tradition. Though not like the Ghanashyām Dol, nor the Kamakhya ruined brick temple, yet we do get evidence of the prevalence of terracotta art in these places. A very interesting boating scene is depicted on plaque, collected by R. M. Nath. The plaque was collected from Sibsagar. It shows a royal boat with a royal figure with full escort. The boat is shown as moving



to its left side. To prove the water, a figure of crocodile is also shown below the boat. It is a Ahom sculpture. Some years back five terracotta plaques were collected from Hirāpārā Śiva temple, Mornoi. The first plaque shows a cow with a calf milking (16.5 x 22 cm). The second and third plaques depicted each a **Gandharva** and **Apsarā** couple flying over the sky (17 x 15 cm & 17x14 cms). The fourth sculpture shows two figures of monkeys under a banana tree (16.5 x 22 cm) (?). The last one shows a figure of **Apsarā** flying over the sky (16 x 18 cm). The style is quite different from the Bhaītbāri style. It has no much relation with the Ahom style, nor it has to do anything with the Bhismok Nagar style. The sculptures found in the recent Sūrya pāhār excavation seems to be early on stylistic consideration and has no relation with this group. These sculptures, therefore, may be dated in the late mediaeval period with the Bāghāpārā sculptures.

Another two terracotta plaques preserved in the A.S.M. must not go unnoticed. The first (22 x 18 cms) one is a couple sitting (kneeling down) with folded hands. The figures are extremely crude. This piece was collected from Pāglātek and deposited by Mr. S. K. Bose. The second plaque is from Belsor. It is a sculpture of Mahiṣamardīnī (40 x 27 cms). This terracotta plaque is sadly mutilated. It belongs to a very late period, as the style shows.

When I visited the British Museum long back (in 1983), I was shown as many as 10 terracotta plaques kept in its reserved

collection. These were collected from Tezpur and not published. I tried to get the photographs of this but failed to get good response. Stylistically, they belong to the Ahom period.

### Meghalaya

Some 25 years back or so a site with extensive ruins came to notice towards west of Phulbari, in Meghalaya State. The site consists of several old tanks, long fortifications carved stone, brick-bats **Śivaliṅgas** and a good number of terracotta sculptures, majority of which are broken. G.N. Bhuyan and Sivananda Sarma had visited the site in the beginning and collected some terracotta pieces. Both Bhuyan and Sarma deposited the plaques in the A.S.M. and published a paper<sup>25</sup>. The area of ruins is called Bhāitabari. Though politically it is in the East Garo Hills district of Meghalaya now, yet it is affiliated to the Hindu culture of the Brahmaputra valley, as it is located in the plains of the Brahmaputra valley. The river Brahmaputra flows at a little distance (towards North) from this site.

The first plaque (29 x 32 cms) of this collection shows an image of **Manasā**. Unfortunately, the lower half of the sculpture is broken. Above the head of the divinity the usual snakehood is beautifully shown. Over the head of **Manasā** there is a trifoil arch supporting "**Piḍā-Śikhara** of the Kalinga style capped by **āmalaka**, **khapuri** and **kalasa**".<sup>26</sup> The second plaque carries the figure of **Kārttikeya**. Like the



previous one, this is also a beautiful art product. Here **Kārttikeya** is made to sit in his usual posture on his **vāhana**. The **āyudhas** held by the god are not clear. On both the sides of the god two female attendants are seen. The upper part of the plaque is broken. The third plaque portrays the figure of **Gaṇesh** in his usual seated posture on his **vāhana**. The figure is badly weathered so that the details are gone. However, the plaque is not mutilated and is in good state of preservation.

"Another plaque measuring ( 26 x 27 cms) shows a human figure of which legs are broken. If the figure represents some divinity is not known. The figure is seen bending the left leg, while standing and leaning the head backward. The objects held in its right hand is not clear. But it looks like a thread, which is near the right thigh. The figure wears a **Karaṇḍa mukuṭa** on its head. The body of the figure is slim. Above the head, **Chāitya** design on which an **āmalaka** is noticed, as in the other case".<sup>27</sup> The next broken plaque (25 x 24 cms) shows a figure in mutilated condition. Its a female figure. It was possibly an attending figure of some god or god-dess. The plaque measuring (13 cms long) show a similar mutilated female figure of which the left breast, legs and upper part of the head are broken. The lower part of the right hand is also missing. The left hand of the figure on its palm possibly holds a pot. The face of the figure has become unshaped at the time of backing or before backing. This is a bulky figure. The upper part of the plaque is

broken. Considering the beauty of the thigh and hip, we can take it as a female attendant. There are some more fragmentary plaques in the group, including a dragon preserved in the A.S.M. which do not attract us.

Sivananda Sarma, as mentioned above handed over a crude variety of figure from **Bālujorā Mouza, Bhāitbārī**.<sup>28</sup> It is a figure of seated **Siva** in **mahārājālāsana**. The **vāhana**, the **Nandī** is also depicted. The **Kuṇḍalas** worn by the god are very prominently shown. The god is shown as bulky and from execution point, it is a crude product of the artist and cannot be compared with the other figures of **Bhāitbārī** described above. All the plaques from **Bhāitbārī** discussed above invariably bear two lines of lotus patel design one at the upper border, the other on the bottom border. This characteristic feature is also seen in the case of the plaques from the cotton college, Principal's residential campus and the plaques from **Kukurmutā**, preserved in A.S.M. These two decorated lotus patel designs have become added attraction for the beautifully done terracotta plaques. The plaque bearing the figure of **Siva**, from **Bālujorā Mouza**, however, is devoid of this decorative tradition, as it has carried folk tradition in style. Stylistically, **Bhuyan** has rightly said that the **Bāitbārī** terracotta can be dated in 11th/12th century.<sup>29</sup>

The recent excavation by the Archaeological survey of India under the Directorship of Mr. A.K. Sharma<sup>30</sup> at



Bhāitbārī has thrown a new flood of light. He excavated at the site covering a vast area, which must have been a big city once, and exposed some mounds which gave direct evidence of the existence **Stūpa** and some temples. He is of the opinion that the huge Buddhist **Stūpa** at the site is datable to "2nd - 3rd century B.C.". He exposed the plan of two ruined temple. During the course of his excavation a good number of beautiful terracotta plaques were found. Those plaques were fixed on the outer walls of the temples for decoration. The style of the terracotta sculpture belongs to 11th/12th century. So, the temples must also date in the same period. It is clear that the **Stūpa** was constructed at the site much earlier than the temples. Mr. Sharma says that his investigation has revealed that there were at least two groups of temples. "In each group at least ten to twelve mounds could be located<sup>31</sup> and if excavation is done properly for some seasons, the real picture of the temples will be known. I had visited that site before the excavation was conducted. I am also of the same opinion. The excavation is not completed in the vast area. It is hoped the A.S.I. will complete the same soon.

In all, Sharma<sup>32</sup> has given descriptions of 48 terracotta plaques found during the excavation of which he has published the photographs of 21 plaques. Of these published plaques, 8 plaques are in good state of preservation, while the rest are mutilated. Photograph show two images of **Gaṇesh**, one image of **Brahmā**, two icons

of **Vinādhara**, one sculpture of **Kālī**, two images of **Ugratārā**, one figure of **Vaiṣṇavī** and one figure of **Umā-Maheśvar**. The rest of the plaques show the figures of **Arjuna** in penance, ascetic, **tāntrik**, ascetic pregnant woman, dancing ascetic, **Gandharva**, female figure, **mṛidangavādinī**, dancing girl, and horse in a row. The quality of art as depicted are of very high order and they portray the one and the same style as we have seen in the case of the terracotta plaques from Kukurmutā, now in A.S.M. and the plaques in the Anthropology Department Museum of Cotton College. In all the cases we find two rows of lotus petal design of decoration, one on the upper border, while the other in the lower border of the plaque. In one word, we can say that the terracotta sculptures of Guwahati and Bhāitbārī belong to one style and product of the same group of artists. The trifoil arch supporting four tiered **piḍa-Sikhara** of **Kālinga** style capped by **āmalaka**, **Khapuri** and **Kalasa** over the head of **Gaṇesh** as depicted in a plaque, illustrated by Sharma, is really excellent piece of work of classical art.

Some more terracotta sculptures were collected from Garo Hills of Meghalaya. The first group comes from Birupur and these are being preserved in the Anthropology Museum Guwahati University.<sup>34</sup> All the terracotta plaques of this group are sadly mutilated. These are broken into pieces in such a way so that their real identities are not at all clear. However, these fragmentary pieces represent the figures of animal only. No



trace of human figures could be found in this group. They may belong to a late period as their style shows. The style of this group carries heavy folk element.

The next group comes from Bāghpārā. The group consists of thirteen (13) number of plaques. All these plaques were collected long back by late R.M. Nath.

The first plaque (4 x 19 cms) depicts a dancing scene in the style of the illustration found in the manuscript painting of Assam. The second plaque ( $14\frac{1}{2} \times 17\frac{1}{2}$  cms) shows a hunting scene. The third one also depicts a Mughal soldier holding a dead animal. The 4th ( $10 \times 20\frac{1}{2}$  cms) sculpture portrays a row of three geese.

The next plaque (19 x 9 cms) carries the figure of a tribal woman carrying something. The sixth plaque bears the figure of Viṣṇu ( $9 \times 13\frac{1}{2}$  cms). The rest of the plaques show a rhino, five calves, fighting bull, Kaṁsa killing the son of Devakī, a devotee seated cross-legged with folded hands, a soldier fixing a cannon, and floral design respectively. The style of these sculpture belongs to late mediaeval period *i.e.*, 17th/18th century.

### Arunachal Pradesh

The A.S.M. houses a few terracotta sculptures which were collected by the then Governor of Assam, Jairam Das Daulotram from Bhiṣmak Nagar near Śadiyā, the easternmost sub-divisional headquarter of Assam on the northern bank of Brahmaputra and deposited in the A.S.M.<sup>35</sup> In all six plaques are on display.

The first plaque carries a standing male figure in putting his legs a part. The left hand of the figure keeps its grip on the waist. The right hand of the figure is shown not holding anything. The face of the figure is mutilated. The second plaque shows a male figure walking while putting its hands upward. The objects of the hands are indistinct. The third plaque represents a soldier, holding a shield and a sword. The sculpture is defaced. The fourth sculpture also represents a soldier holding a shield and a sword. He is wearing a conical cap. The soldier is shown as running. The fifth one is a sadly mutilated plaque, which shows a couple standing apart. The head of the male figure is missing. The female figure stands to the left of the male. But they are not in amorous posture. The face of the female figure bears very crude style. The last terracotta plaque shows a rowing scene. It is very interesting. A couple is seen on boat. The female figure is seen standing on the boat, while male are is seen in the near of the boat and rowing it with an oar. Rowing scene depicted in sculpture in this region is very rear. However, a plaque collected by R. M. Nath<sup>36</sup> shows a royal figure with escort going in a boat is more interesting, which is described under the Assam sub-head. The last plaque of the group preserved in A.S.M. shows a male figure holding the hair of another male figure, out of anger and raising its right hand to give a blow or slap to the other. The second figure of which the hair is held by the standing figure, is kneeling down



and touching the feet of the figure inflicting punishment on it.

The Bloch<sup>37</sup> visited Bhismak nagar near Śadiyā long back and traced some ruins of the city. From the ruins he found some tiles i.e., terracotta plaques of which number amounted "to sixteen of which twelve were still *in situ*, the balance being recovered from the debris and mud".

"Nine of the best specimens of tiles are shown on plate VIII. Generally speaking, the carvings represent figures of men, animals, birds, flowers and geometrical pattern." His list of the plaques are quoted below.<sup>38</sup>

- 1) Bearded man, dancing, holding staff in right hand, and unknown object in uplifted left hand, *see plate VIII, 1,*
- 2) Beardless man, with conical cap running, holding spear in right hand, dagger fastened to left side of girdle, *see plate VIII, 2,*
- 3) Pair of dancers : their uplifted eight hands hold some sort of musical instrument (2); the left hands, holding a stick, rest on the hip; perforated ears; eyes and mouths wide open; snub, nose, and hair arranged in strands ending in spirals, *see plate VIII, 3,*
- 4) Two peacocks, with their bodies twisted around each other; small tree or flower on each side, *see plate VIII, 4,*
- 5) Lion or tiger, standing against tree, with forelegs up-lifted; tongue pro-

truding from mouth ; tail ending in a cluster of five bunches of hair, *see plate VIII, 5,*

- 6) Horse, with saddle and bridle, *see plate VIII, 6,*
- 7) Circle, formed by two lines, with dots between; inside ornament, formed by twisting a rope or cord into four larger and many smaller irregular circles of ellipses,
- 8) Plant, with five long, pointed leaves,
- 9) Two squares, laid crosswise into each other; corners filled with ornamental sprigs, in inner square, ornamental flower, with four small and four large petals,
- 10) Group of four flowers; the largest one is cup-shaped, with four leaves or petals on each side; two small flower below, and a bud, rising over largest flower,
- 11) Lotus shaped ornament, with eight petals arranged around circle in centre, having cluster of nine drops, *see plate VIII, 7,*
- 12) Falcon carrying hereon; *see plate VIII, 8,*
- 13) Dancing figure; right hand uplifted, left hand resting on hip; head resembles those of dancers on tile no. 3; broken, *see plate VIII, 9,*
- 14) Five fragments, making up half the original tile, which evidently had a bird, resembling a cock, as ornament,



- 15) Fabulous bird, with pointed crest ; I am unable to suggest what kind of bird this is; two pieces; corner missing,
- 16) Three pieces; lotus - shaped ornament, similiar to that in tile no. 11; inside, circle formed by two lines.

Bloch has published the photographs of only 9 (nine plaques). B. K. Barua has published the photograph of 13 (thirteen) number of plaques from Bhiṣmak nagar, evidently from the list of Bloch.<sup>39</sup>

Stylistically this group of terracotta sculptures can be placed around 13 - 14th century. They do not have any stylistic relation with the Ahom terracotta sculpture. Nor they have any affinity with the pre-Ahom terracotta style as depicted in the sculptures from Bhaitbari and Guwahati. This group of sculpture in question influenced by flock element bear tribal affiliation. We know that the Chutiās who originally belonged to the greater Bodo group of population ruled in this region (around Śadiyā), now inside Arunachal Pradesh, from 13th century. Therefore, this art work may be attributed to the Chutiās.

The Indian Museum, Calcutta<sup>40</sup> has a good number of terracotta sculpture collected long back from Śadiyā region (Bhiṣmak nagar region). The total number of the collection is twelve. These were found by Dr. Bloch as mentioned above from Kundilnagar near Biṣmak nagar (near Śadiyā) and these are from the same list. Now Śadiyā is in Assam. But the ruins of Bhiṣmak nagar falls in Arunachal

Pradesh. The plaques were received on loan from the Govt. of Assam through the good offices of Mr. K. N. Dikshit, Supdt. Archaeologist of Eastern Circle.

### Tripura :

Tripura is an important state in so far as the terracotta art is concerned. As the state is located in a strategic point, far from the mid India, communication system with rest of the country is bad, its heritage is not very much known to the scholars of other parts, except Bengal. The three sides of the State touch the international boundary of Bangladesh. The cultural intercourse took place from the west through undivided Bengal. After the creation of East Pakistan and then Bangladesh the flow of culture from the west was closed.

Tripura terracotta tradition was much influenced by the Hindu and Buddhist themes as well as the style of Bengal, Bangladesh is dearth of hills and so also the rock and stone. So, the artist of that region in the past took clay as the media of art and also architecture in the late medieval period. Of course, as far as the stone art is concerned, Bangladesh in the past, occupied a pride place. But the materials must have been imported. But the clay was easily available locally and even the poor artist also could have it without difficulty. This also certainly influenced Tripura artist. Apart from the terracotta art of Pilāk in South Tripura, terracottas are also found in places of Amarpur and Udaipur. A major part of these are being preserved in Rājendra Kirtishālā and Tripura Govt.



Museum.<sup>41</sup> The terracotta plaques are found in Tripura generally in 8 x 6 inches in size. The theme of the art is a) ornamental lotus leaves, b) running deer, c) lions, the royal insignia, d) elephant and camels e) figures of Hanumān, f) Flowers and leaves. This art of the state is a folk art and was the creation of the later part of the 15th century and this art was practised in abundance during the reign of Dhyānamānikya.<sup>42</sup>

The temples belonging to the early period or ancient period are now rare. But there was a good number of temples as their remains show. Majority of them are located in Udaipur. These must have been once decorated with the terracotta sculptures as the remains show.<sup>43</sup>

According to Acharjee, the Sholikona temple is the best terracotta temple of the state<sup>44</sup>. Amarpur fort and place also is very rich in terracotta tradition. Both the monuments were constructed during the period Dhyānamānikya. Both these monuments are in decay.

Tripura terracotta, which belongs to the folk art tradition of 15 th/16th century, has Hindu style as mentioned above. But Buddhist and Muslim style did penetrate into the Tripura terracotta. Tripura terracotta art can be group into two broadly i.e., one with Buddhist influence and the other with own art style of Tripura.<sup>45</sup> According to the theme and style, Tripura terracotta art can be grouped as folk art. However, Pilak art tradition is the extension of the Pāhārpur-Kotbārī art style

and does not depict the Tripura art style at all.

Religious theme of the *Mahābhārata* and the *Rāmāyana* as we see in Bengal, Assam and other place in terracotta art, is absent in Tripura art of clay. Depiction of social life is also absent here. The birds animals, flowers, creepers etc. dominate the theme of Tripura terracotta art. The camel, lion, rhino amongst other animals are found depicted in the clay art of the State. But how the depiction of camel found a place in the clay art of the State is not known. Possibly, it is due to the Mughal influence from the greater Bengal. The depiction of Rhino can be justified as Rhino is available in Assam, a State of North East. The depiction of lion is also justified as the lion was the royal insignia of the Tripura Kings.

Terracotta art dominated by local folk art tradition and also Bengal influence, though not very refined, as is found in Assam and Meghalaya, was a flourishing art of Tripura during the time of *Maharaja Dhyānamānikya*.

#### Nagaland :

The state of Nagaland has nothing to show much activities of brick and terracotta work. No terracotta plaque has been reported so far. The remnants of the Rājbarī i.e., the capital complex, however, conclusively prove that the brick was used for construction work. From the remaining brick standing gate of the compound of the capital of the Kachārī Kings can infer that



terracotta sculptures must have been practised by the artist to decorate the royal capital which is in plains. Dimapur was the first capital of the Kachārī Kings, who flourished in 16th century. The tragedy is that Kachārī people abandoned the place as soon as it was shifted Maibong. Whatever Kachārī people were living at Dimapur, after Dimapur was included in Nagaland, they left Dimapur out of fear of Nāgā people. As the ruins have nothing to do with the Nāgā culture, the site becomes nobody's property and antisocial elements destroyed the other relics except the existing portion of the brick main gate and the monolithic decorative stones. The A.S.I. has protected the site.

Mizoram has no terracotta tradition at all. Manipur also does not have terracotta art tradition, though pots and potteries are found.<sup>47</sup>

### Conclusion

Earlier in some occasion in the matter of study of terracottas from Assam, I made some observation, I do not like to make any departure from it. I repeat the same with some additional comments as given below.<sup>48</sup>

- a) The Daparvatīā terracotta figure is the earliest (6th century) known terracotta sculpture in the North-East India. We may agree with R. D. Banerji<sup>49</sup> and C. C. Dasgupta<sup>50</sup> in respect of its dating in 6th century. We must take it as the earliest terracotta plaque in the absence any sculptural evidence from the newly

excavated **Stūpa** at Bhāitbārī, which is dated by A. K. Sharma<sup>51</sup> in c. 2nd century B.C. on stratigraphic evidence only.

- b) The Daparvatīā terracotta sculptures found in the ruined temple site and in the nearby village bear stylistic relation with the terracotta art from Nanāth though it is of slightly later period. Both the groups of sculptures are executed in high relief and both the groups bear Gupta or late Gupta characteristic feature. But Pāhārpur sculpture is somewhat bigger, and in higher relief. Nanāth terracotta should be dated in c. 8th/9th century.
- c) There is marked similarity of style amongst the terracotta art from Kukurmutā (Chenikuthi), Cotton College Principal's residence campus and Bhāitbārī. The emaciated figure of dancing **Brīngi** from Siddheśwārī temple, Śoālkuchi now in A.S.M. is nothing but the depiction of the figure of **Bhrīngi** from Kukurmutā, Guwahati, now being preserved in A.S.M. Bhāitbārī is now politically in Meghalaya, but culturally it is very much with the plains of the South bank of Brahmaputra of Dhubri and Goalpara district of Assam. All these sculptures show refined treatment in workmanship and they were prepared from moulds. It is sure that same moulds were used in certain cases. It proves that as stone and metal art reached its zenith by the 12th century in Assam and Bengal region, in case of clay art also in Assam



and Meghalaya we get the same picture. But to our knowledge such refined style or aristocratic style in terracotta art is not found in greater Bengal or any other part of the country. S. S. Biswas<sup>52</sup> who has made a thorough study of terracotta art of Bengal has not illustrated any sculpture in his work which is similiar to Bhāitbārī, Kukurmutā, Guwahati and Śoālkuchi refined work of art. Dasgupta<sup>53</sup> has also not illustrated any photograph of this type. So long terracotta art was known as folk art only. But the Assam-Meghalaya terracotta art tradition of refined art has disproved it.

- d) The votive tablets bearing the figures of Buddha found in Assam are commonly

noticed in Bihar-Bengal region. These are, of course, cast and devoid of folk element.

- e) Terracotta art in Assam and Meghalaya or the entire N.E. India reached its zenith unlike Bihar and Bengal region by the 12th century and it became a sophisticated art based on almost classical style on Hindu and Buddhist themes. However, in Ahom-Koch period the standard fell down and folk elements became heavy, as we see in the stone, metal and wood art also. The number of terracotta plaques in Assam particularly is very limited. It is sure that excavation will throw further new light on this subject. Complete excavation of the Āmbārī site in Guwahati and Bhāitbārī will certainly reveal more information.

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- 13) Ibid.
- 14) R. D. Choudhury, *Archaeology of the Brahmaputra Valley*, New Delhi, 1985, p. 1699
- 15) R. D. Choudhury, "Terracotta Sculptures from Assam etc." *Prof. Sankalia Fel. Vol.*, 1989 edited by Prof. Bhaskar Chatterjee and others, p. 412.
- 16) Ibid.
- 17) Ibid., p. 413
- 18) It reads "Ya Dhamma Hetu Prabhaba"
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- 20) Bhattasali, *op. cit*, pl. X (b)
- 21) These miniature clay Śivaliṅgas one in the custody of the Directorate of Archaeology of Assam.
- 22) *JARS*, Vol. XIX, 1970, pp. 46-48, pl. I-III.
- 23) I am grateful to Mr. J. Das, Supdt., Archaeologist, Guwahati for his help. The excavated site at Suryapahar was seen by me recently.
- 24) R.D. Choudhury, *op.cit.* p. 411. Those plaques however, could not be located. May be they are misplaced.
- 25) G. N. Bhuyan, Notes on the terracotta of Bhaitbari (Garo Hills) , *JARS*, Vol . XX, 1972, published in 1972-73, pp. 8-13. Also see, Choudhury, *op.cit.*, p. 412.
- 26) Choudhury, *op.cit.*
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New Delhi, 1993, preface pp. 13-14.
- 31) Sharma, *op.cit.*, p.35
- 32) *op.cit.*, pl. XXX
- 33) *op. cit.*, p. 44
- 34) I am grateful to Professor H. C. Sharma and Dr. Sankar Roy, for their kind help. *Also see* Rabin Dev Choudhury' "Asamar Mrinmay Bhaskarya" *Sañjnyā* 3rd year, 1987 (Assam) Edited, Nilamani Phukan, p.66
- 35) Choudhury, *op. cit.*, p. 167
- 36) I am grateful to Mr. S. K. Bose for supplying me a copy of the photograph of the object.
- 37) T. Bloch, *Annual Report of the Archaeological survey of India*, 1996-7. *Also see*, *A Source book of the Archaeology of Assam and other N. E. States of India.*, pp. 9-11.
- 38) *Ibid.*
- 39) *Ibid.*, *Also see*, B. K. Barua, *A Cultural History of Assam*, Vol.I.
- 40) This information was given by Dr. S. K. Chakraborty, Director, Indian Museum, Calcutta, very recently. I am grateful to him. I have personally seen the objects. The note and list of the terracotta plaques received from Dr. Chakravorty is quoted below :

"On loan from the Government of Assam through the Superintending Archaeologist, A.S.I., Eastern Circle Vide Dy. NO. 223 of 21/7/23 date of entry : 30/7/1923.

Another important acquisition deserving special notice is a collection of carved tiles, twelve (12) of which Dr. Bloch found fixed on the inner side of the city wall of Kundilnagar near Bhishmak nagar, to the east of Śodiyā in Assam, while four others be lay out of the debris, within the wall once stood the small temple of Durgā called Tamreswari, now in ruins. Dr. Bloch has pointed out that some of the carvings on the tiles, the figures of a tiger (or lion) and of a peacock, and one of the ornamental patterns, closely resembled those on the monolithic columns found at Dimapur in Assam. The tiles have been received on loan from the Government of Assam through the good offices of Mr. K. N. Dikshit, Supdt. of Archaeologist, Eastern circle.

Ref : *Annual Report of the A.S.I.*, 1923-24, p.104.



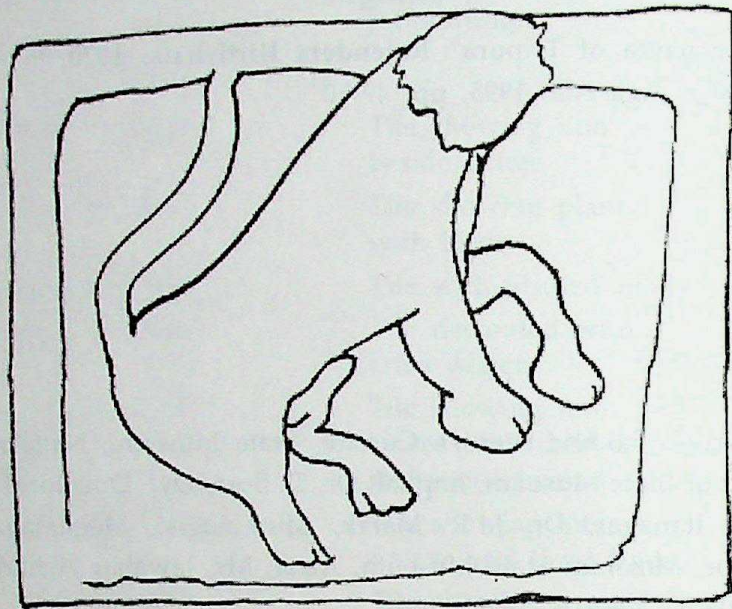
## A S S A M

Sl.No.	Acc. No.	Description	Locality
1.	N.S. 4174 A 20147	Tile decorated with lotus design	Tamreswari temple Kundilnagar Sadiya, Assam
2.	N.S. 4168 A 20159	Tile showing lion beside a tree	"
3.	N.S. 4172 A 20155	Tile showing plant with birds.	"
4.	N.S. 4169 A 20154	Tile with bridled horse	"
5.	N.S. 4170 A 20146	Tile decorated with lotus design.	"
6.	N.S. 4173 A 20150	Tile showing four leaves with their stems intertwined.	"
7.	N.S. 4175 A 20157	Tile showing lotus flower and three buds.	"
8.	N.S. 4165 A 20656	Tile showing a male figure wearing conical cap and running with a spear held in the right hand and dagger on the waist.	"
9.	N.S. 4167 A 20655	Tile representing two peacocks with their bodies entangled and standing face to face.	"
10.	N.S. 4166 A 20654	Tile showing a pair of dancers holding damaru in their right hands.	"
11.	N.S. 4176 A 20151	Tile carved with lotus design (4 pieces joined together).	"
12.	N.S. 4178 A 20153	Tile with dancing male figure (3 pieces joined together).	"
13.	N.S. 4177 A 20149	Tile showing lotus design (3 pieces joined together)	"
14.	N.S. 4179 A 20152 broken.	Tile showing fabulous bird;	"
15.	N.S. 4180 A 20148 twisted creeper.	Tile decorated with	"

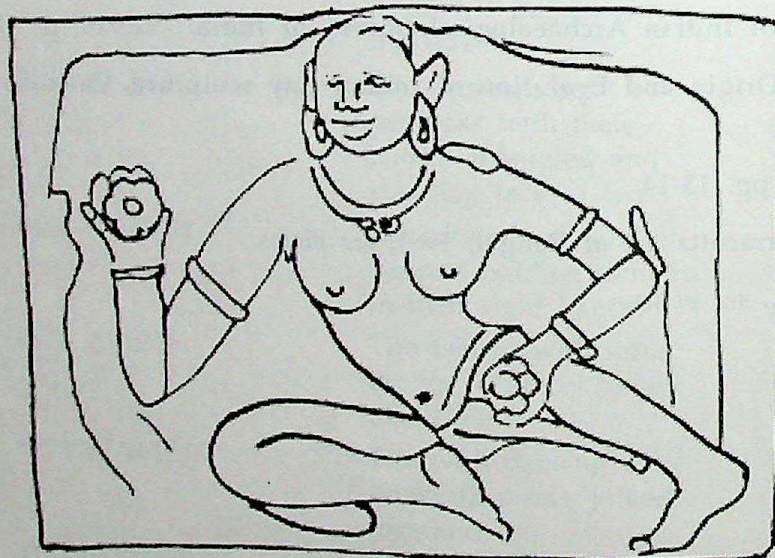


16. N.S. 4171 A 20158 Tile with hawk and prey "
17. A 24785 Carved brick representing two armed Kali, badly damaged. "
41. Jahar Acharjee, "Terracotta of Tripura" *Rajendera Kirtishala, 1970-95 - Silver Jubilee Commemoration vol.*, Agartala, 1995, pp. 47-50.
42. *Ibid.*
43. *Ibid.*
44. *Ibid.*
45. *Ibid.*
46. *Ibid.*
47. I am grateful to Keruno Sakhrac (Kerry), Curator, State Museum, Nagaland, Dr. K. Savita Devi, Curator, Manipur State Museum, Imphal; Dr. D. Bora, Dy. Director, Deptt. of Research, Arunachal Pradesh, Itanagar, Dr. J.I.R. Marak, Museologist, Meghalaya State Museum, Shillong; The Curator, Mizoram State Museum, Aizal; Mr. Jawahar Acharjee and Mr. B. K. Dev Baman, Agartala.
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53. Dasgupta, *op.cit.*, *see plates*.





Animal figure - Pilak (?) Tripura



Vidyadhara (?) Pilak (?) Tripura



# STYLE AND TECHNIQUE OF TERRACOTTA PRODUCTION IN ANCIENT BENGAL

Samir Kr. Mukherjee

## Prelude

Terracotta art has a continuous history in Bengal. More than in stone and metal, artists of Bengal have shown extraordinary competence in fashioning terracottas in all periods of history. This is evident from the vast repertoire of terracotta figurines and objects found at various sites both by systematic excavation and accidental finds. Easy availability of clay of fine variety in plenty in the rich alluvial riverine plains of Bengal gave the artists an immediate impetus for making images in clay. Another reason for persistent dependence on clay was, no doubt, due to general paucity of stone as well as cost involved in production through this medium. The rich and varied contents of terracotta art objects found at many early historical sites in Bengal prove beyond doubt the wide popularity of these objects.

Archaeological investigations during the last thirty years of time in some Chalcolithic sites as well as in early historical sites have yielded substantial materials for the study of terracotta art in

Bengal. Notable examples of hand made terracotta mothergoddesses came from Mangalkot (period I and II), Burdwan, Pandurajardhibi (Burdwan) in Period II, Phallus in Period I at Mahisdal (Birbhum), elephant at Banewardanga (Burdwan). These are well baked and applied with slip of both red and black colour. From the objects surviving from the early farming communities in Ajay, Kunur, Mayurakshi valleys it can be assumed that like their counterparts in the contemporary sites in central and western India they believed in fertility cults.

The Maurya period finds discovered from Tamluk, Chandraketugarh, Mahasthangarh, Mangalkot, Pakhanna although few in number, represent female figurines akin to the prevailing types of north and eastern India in particular. Here, the face is made out of mould while the body is hand modelled. The jewellery is done by applique technique. Elephant figure with stamped designs and applied with black slip is common. The clay is of finer grain using well levigated variety of clay.



In the succeeding Sunga period, we notice a proliferation of terracotta figurines. These are made out of single mould. Finished moulds of fine and intricate workmanship have also been found at some sites. Use of pigments after firing has not been noticed. All of us know that typical Sunga style is characterized by compositions in low relief usually in thin plaques. Here also quality of clay is of finer variety.

In the Kushana period terracotta was equally popular and many interesting and popular varieties continued unabated. Terracottas during this period were both moulded and modelled. At times both the techniques were employed for the production of one particular piece. Hand modelled specimens exhibit a perfect mastery in rendering expressions of the human faces. Evidence is available to show how beautifully the artists worked on the finished objects by way of incisions and notches. Thus it appears that the artists working through the medium of clay by hand enjoyed enough freedom and spontaneity compared to moulded types. For example, the outlines of the eyes, eyebrows have been done simply by using a sharp tool or the sharp slit edge of bamboo on wet clay, thereby creating a sense of dynamism and modulation of the form. Two distinct art trends appear to have flourished in the Kushana Period. Beside the continuation of the folk art traditions already current from the preceding centuries, the period under review witnessed the emergence of new forms, motifs and techniques due to social

and cultural changes brought about by the influx of new races in the country. A distinguishing feature in the manufacturing of terracotta in this period is the introduction of double mould, which in all probabilities, was due to Roman influence. Use of slip has also been noticed during this period. From close examination of terracottas of this period, it appears that the medium of clay is of coarser variety and too much use of tempering mediums are noticed.

The art of terracotta during the Gupta period mark a sharp decline in Bengal. Till now only a few sites yielded terracottas that can be ascribed to this period. The sites include Tamluk, Mahasthangarh, Panna, Deulpota, Sagar Island, Mahanad. Most of the types are strikingly akin to those noticed elsewhere in India. The small plaques and figurines in some cases bear traces of pigmentation applied after firing. During this period, terracottas are all made by moulds. Here also quality of clay is of fine variety using well levigated clay. The mode of manufacture of the terracotta figurines and objects resembles in many ways that of manufacturing potteries, seals and sealings. It is interesting to note that the prevailing practices of making potteries, terracotta figurines and objects among the *Kumbhakara* (potter) community in various parts of the country in many ways remind us of the similar practices followed in the past. It is to be noted here that manufacture of terracotta figurines is done mostly by the women members of the potters' community during their leisure



hours on the eve of festive occasions like fairs and religious ceremonies when demand for these objects are high. The principal stages of manufacture of these objects are as follows :

### Collection of Raw Material

The manufacture of a good quality of terracotta figurines is solely dependent on quality of clay. Through long experiences, keen observation and physical testing potters are well aware of the composition and texture of clay and they collect the clay either from a river bank or tank bed or from a sallow land. Whenever a suitable clay deposit is located in a nearby area, they continue to acquire the clay from the same pit over a long time. In different parts of the country, clay is named after the ingredients of contains. An idea about the classification of clay and collection of clay is available from some texts of late date like *Kasyapasamhita* and *Samararoasutradhara* of Bhoja. The soil is classified into three varieties like, *jangala* (arid), *anupa* (damp), and *misra* (mixed). The soil which is easily workable is known as *anupa*. The soil having both qualities is *misra* i.e., the soil is neither hard nor soft.

After collection the clay is deposited in large quantities during the summer season; otherwise pits become water-logged at the time of monsoon. The heaped clay is usually covered with a shade or kept in one corner of a room or verandah because rain water deposit may deteriorate the quality of the clay.

### Preparation of Clay

The greatest efficiency of the potter lies in his capability of preparing clay suitably. The process of preparation differs from region to region, depending on the nature of the locally available clays. But there exists certain standardized processes which are adopted by potters all over the country. These are primarily in relation to cleaning, mixing and kneading. Like the present day practices, almost similar practices were in vogue in ancient time. There exists mainly three processes of cleaning clay. The commonest method of cleaning the clay is drying under the sun and impurities like pebble, *kaukar*, roots etc. are picked up by hand. The clay is pulverized by means of a wooden mallet. The clay is then sifted through a bamboo or iron seive for the removal of fine gravels, roots and other impurities. The pulverized clay is moistened by adding water according to need. The clay modellers of the Maurya, Sunga and the Gupta periods used well levigated clay of superior variety.

There is another mode of cleaning the clay when it contains too much impurities. The potter after thoroughly pulverizing and drying the clay dump it in a pit and churn the same with water using his or her feet or a bamboo pole. The prepared slush is sifted with the help of bamboo or iron seive. The clean clay is thus allowed to settle out the bottom of the pit for sometime.

There exists a third method of cleaning clay. Clay dug out in large clods are sliced



with the help of iron slicer while the clay remains wet. While slicing the clods, unwanted particles are eliminated. The clay thus acquired is of finer variety and becomes ready for use.

### Use of Tempering Mediums

In order to improve the quality of clay and to resist cracking, shrinkage, certain tempering mediums are widely used by the potters. Close examination of terracotta finds during the period under review offer enough proofs that the potters used a variety of tempering mediums. These consisted of ash, chopped rice husk, cattle dung, sawdust and sand. Sometimes impressions of rice, seeds, greasy materials and husk have been noticed in terracottas of the Kushana period that point out the existence of impurities in clay. The addition of tempering mediums counteracts warping, shrinkage, cracking that may occur during sundrying or firing in a kiln or oven.

### Kneading

Kneading of clay is an essential job for the production of any object made out of it. The potters knead the clay first by both the hands and then stamp by foot. The whole lump of clay is divided into separate chunks or clods for convenience. These chunks are further meticulously kneaded by hands and during the time of kneading undesirable materials like *kankar*, roots are eliminated. Sometimes chunks are further subjected to slicing with a thin piece of ware of slit bamboo in order to locate and

eliminate further unwanted impurities that might have escaped notice. Sometimes water is added suitably to prevent sticking into the mixing surface. The processed clay lump is covered with a piece of wet cloth in order to keep it moist until used. This kind of well levigated clay produced terracotta objects of superior quality.

### Preparation of Mould

The ingenuity of the craftsmen is best reflected in making moulds in clay. The mould is entirely made by means of engraving by hand using finer needles in iron, bone, double-edged knife like tool with a tapering end. Like preparing seals, manufacture of terracotta moulds is considered a skillful job on the part of the artists. Experienced potters are entrusted with this job. After leather drying for sometimes, moulds are put in a kiln for firing. These are treated as precious possessions of the artists. These are used occasionally for producing figurines and objects whenever necessary. Unless and until moulds are damaged or defaced by continuous use these are retained by the artists as priced possessions. Moulds are of two types, viz. single and double mould. Double moulds are used to produce the frontal and rear views of a human and animal figurines. After removing from the moulds both views are sundried or leather dried for sometime and later joined together leaving inside hollow. Very often a hole is retained on the rear of the objects. This is intended both for preventing crack or shrinkage during firing as well as for suspending the



object on the housewalls. Both shallow moulds and deeply cut moulds have been found in course of excavations and explorations.

### Application of Slip

The commonest slips applied in Bengal like other sites in India are red, black and white. Red ochrous clay (an iron oxide produce) is the widely used mineral paint. Potters or clay makers in different parts of the country still follow the traditional method of using red ochrous slip before firing. It has been observed that potters collect red ochre from far away region if the material is not locally available. In Karnasuvarna (Dist. Murshidabad), potters of Kathalia village procure red ochre (*lalmati*) from the bank of bour (dried up river bed) in village Chandpara-Rangamati, which is about 10 km away. The potters community at Natunhat (Mangalkot) and adjoining areas similarly procure red earth from a distant area in granulated form and the slip is prepared out of it by powdering the material. The potters of Uluberia (Howrah) call the red earth as *Banakmati*, which they collect from Ghatal, Khirpai in Midnapur where lateritic earth abounds. Similarly in many parts of Bankura and Birbhum red ochrous earth (known as *lalmoram*) is used by the potters (*Kumbhakara*). The red ochre (haematite) is known as *Hirmich* and used in Punjab, U.P., Bihar and Rajasthan. Present day potters mix the medium with vermilion (mercuric sulphide) to produce dark red colour.

A kind of Pyrolusite (manganese dioxide) known locally as *Paraie* produces black pigment. In Punjab, a kind of levigated ochre (known as *Nor*) mixed with indigo producing dark colour is still in use.

For obtaining white pigment, calcium carbonate or calcium sulphate known *Khadi*, *Khariva* in local dialect is still in use. This was the medium used widely in the past.

The pigments collected by the potters' community from natural sources are powdered and dissolved in water to the required consistence. The solution is generally made thin and sometime cooked in fire for sometime and after cooling, it is mixed with *rajan* (gum). Ancient texts prescribe the mixing of juice procured from mango barks, *Khadira* tree, *gub*. Nowadays various synthetic commercial colours are applied on terracottas which are not fired in a kiln due to high cost of fuels. As a result these are fragile.

After the terracottas are treated with slip, these are spread over the ground on mat on a open under the direct rays of the sun, and at intervals these are turned for even drying. After thorough drying for a few days, these are subjected to firing in a kiln or an oven.

### Tools used for preparation

The terracotta figurines and objects are painted now with a paint brush. A paint brush is prepared simply by folding a piece of cloth. A bamboo stick bruished at one end is also used as paint brush. The potter



maintains a number of brushes for applying different colours to separate objects. Paint brush made of hairs from donkey, or horse's tail, bamboo bristles are also in use. These were also done by potters in the past.

### Seals used for Impressions

The various types of stamping seals were in use to render impressions on the terracotta figurines when there are leather dried or half dried. Seals are made out of wood, iron, horn, baked clay or of wild fruit. The seals bear usually geometrical designs. Holes and motifs were done by pointed iron, bone, needle, slit and painted bamboo etc.

### Technique of Firing

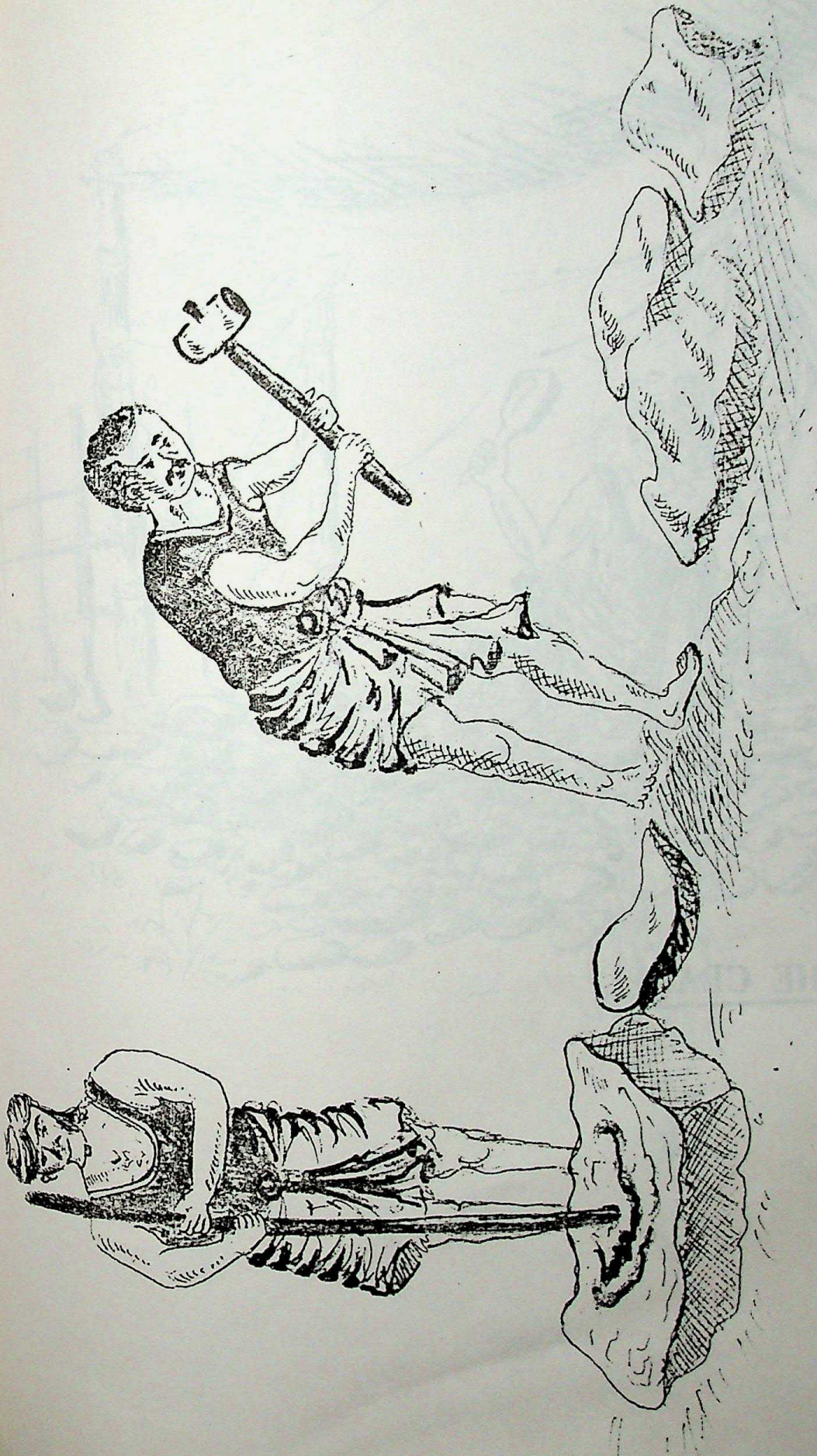
The technique of firing terracottas like firing potteries etc. can broadly be classified into three distinct types— i) Firing in open, ii) Firing in an oven, iii) Firing in a kiln.

Terracotta figurines and objects are generally fired in an oven or in a kiln. Woods, dried cattle-dung cakes, vegetal matters in layers are used as mediums. The

entire pile in the shape of a dome covered with withered grass, hays or husks is finally plastered with mud, leaving holes at the top for proper emanation of the smoke. Channel is left unplastered through which fire is kindled. The duration of firing and cooling varies between three to ten days. It is to be noted that the figurines are baked to various shades. The shade depends on the chemical components in the material and also on heat and the process of firing. If the air has free access through the holes of the kiln during baking, the iron which it contains in the clay will be oxidised and this produces the red colour, of, however, the combustion if imperfect, ferresoferric oxide is produced and the terracottas are greyer black.

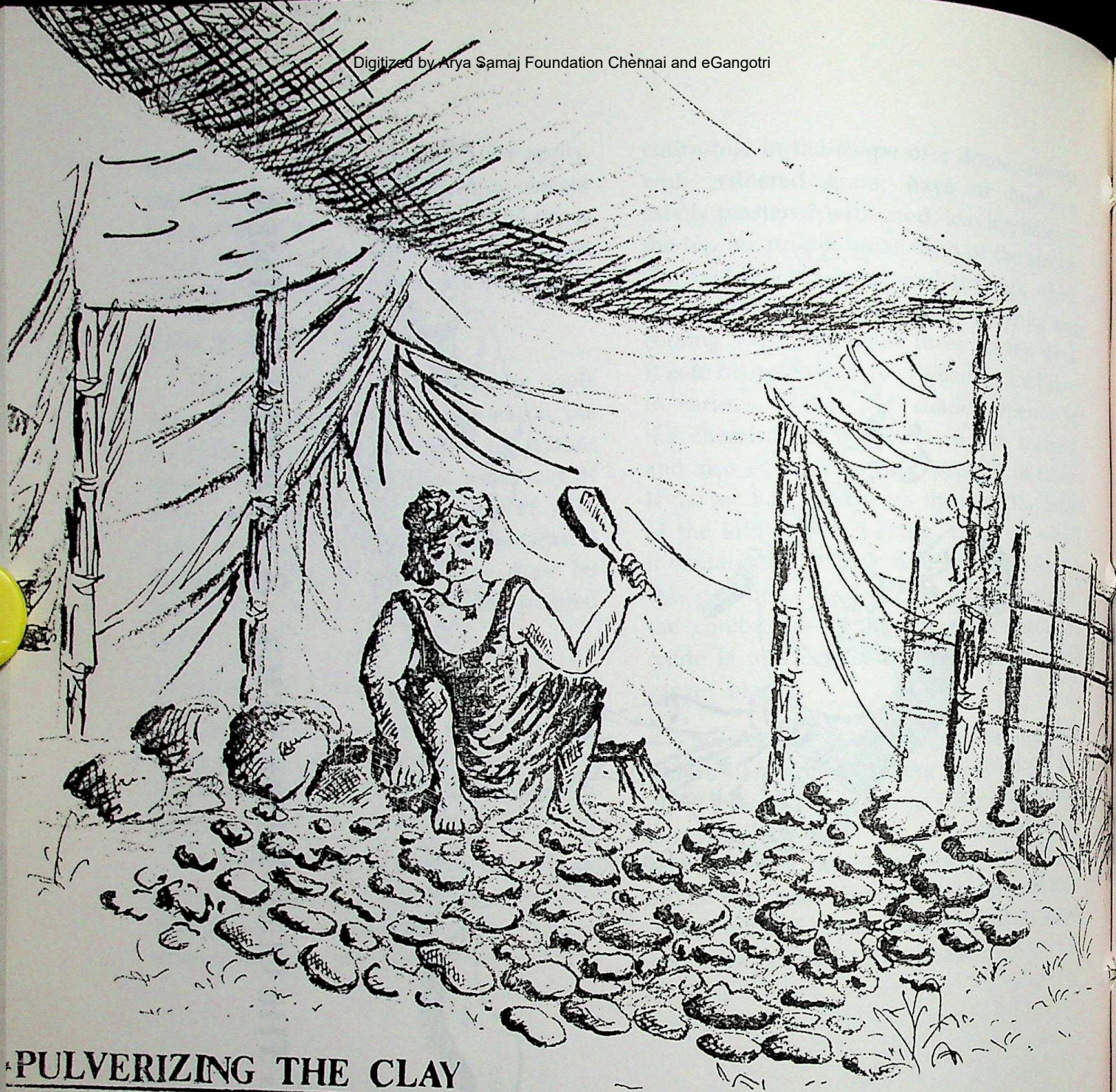
Sometimes vegetal pigments and even *kajjala* (lamp black) were applied to finished objects after firing. Chances of their survival are rare. A few examples of terracotta toy objects applied with slip of silver and gold dust have been survived. These remind us of gold and silver using ceramics of the N.B.P. phase.





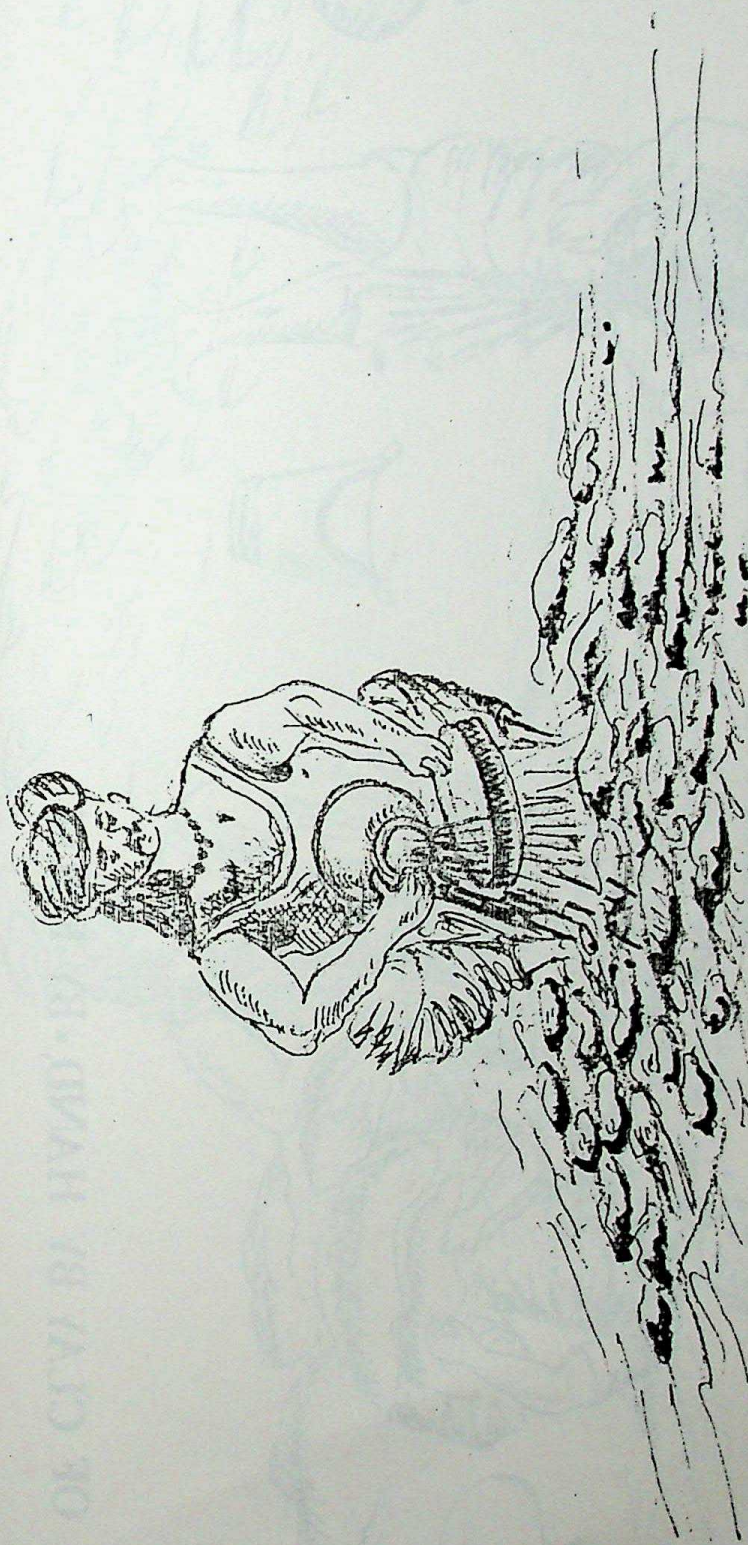
**\*PULVERZING THE CLAY WITH STICK & WOODEN HAMMER.**





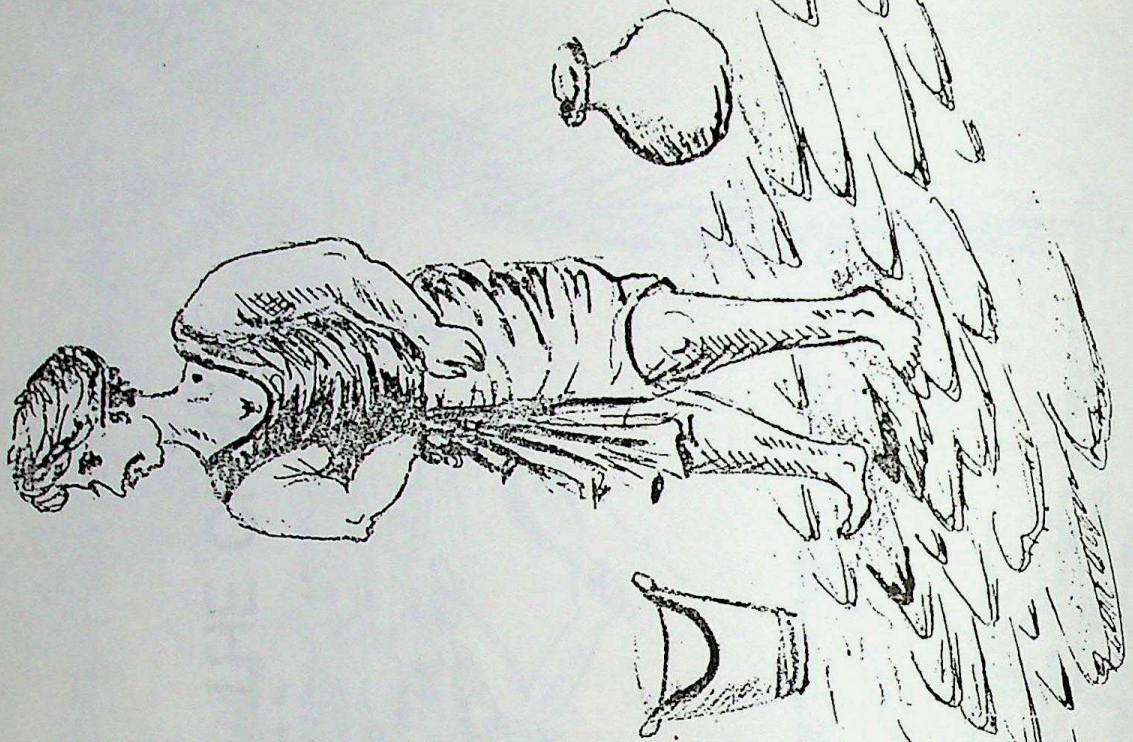
## PULVERIZING THE CLAY





★SIFTING THE CLAY.





★KNEADING OF CLAY BY HAND, ★BY FOOT





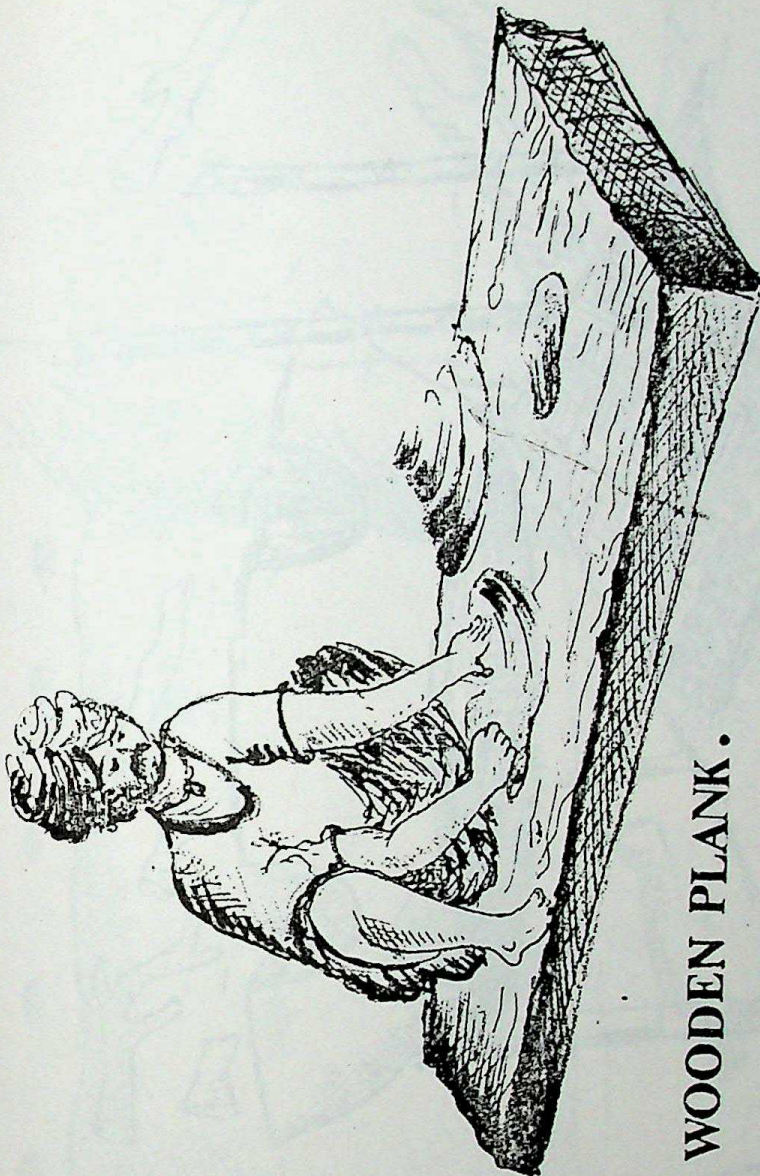
★ SIFTING THE CLAY.





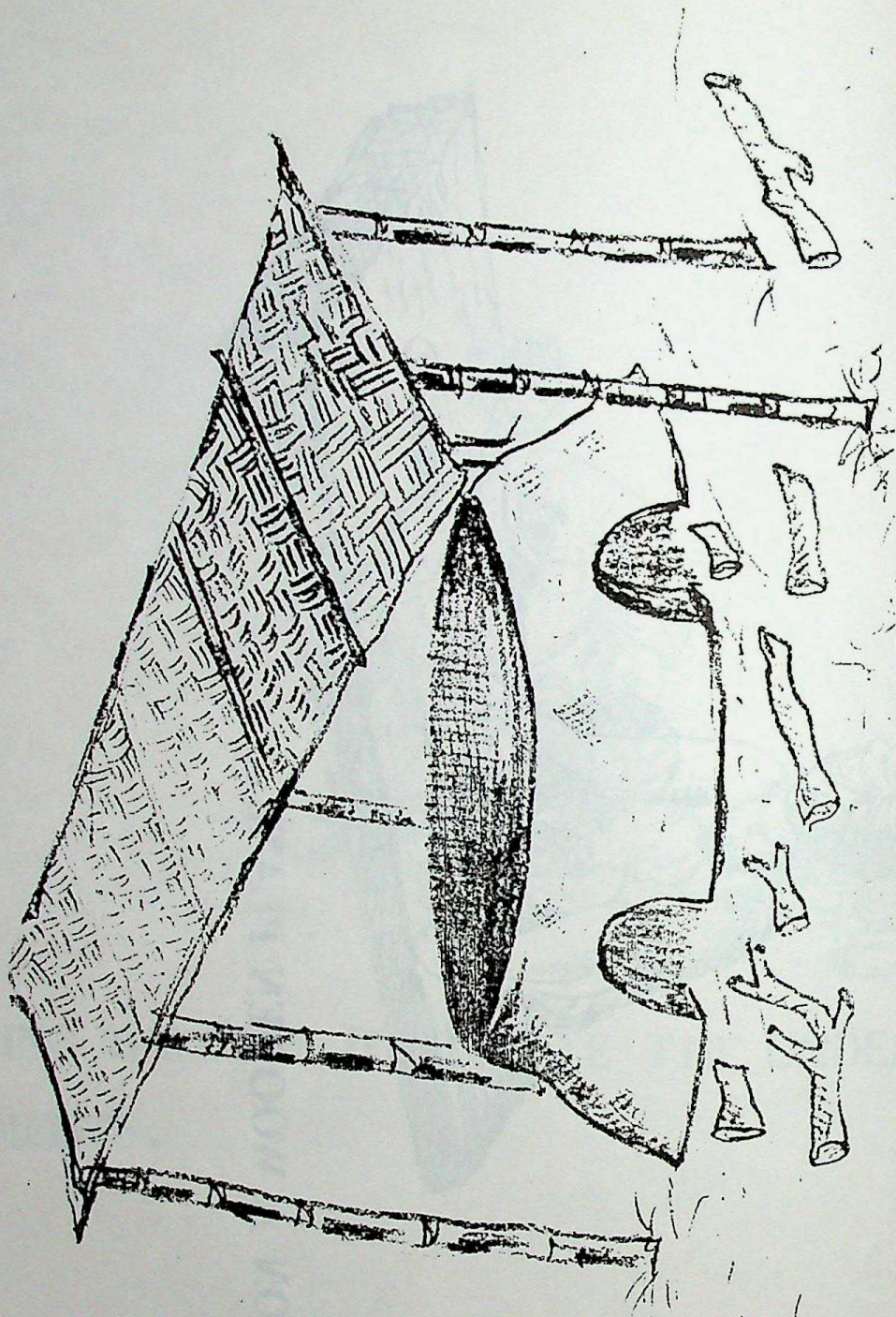
**\* SLICING THE CLAY TO ELIMATE THE UNDESIRABLE  
ELEMENTS.**





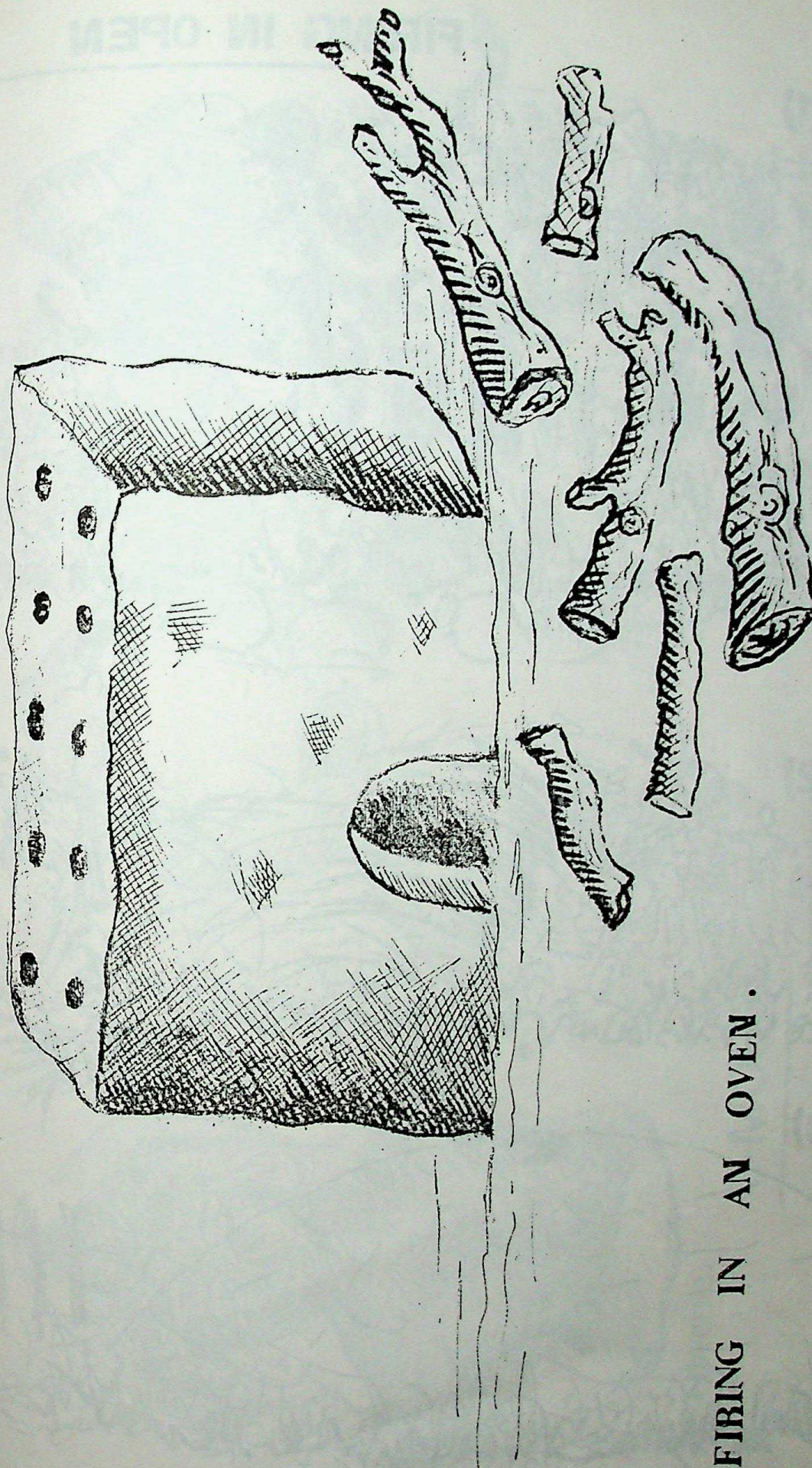
★KNEADING ON A WOODEN PLANK.





★ FIRING IN A KILN, ★

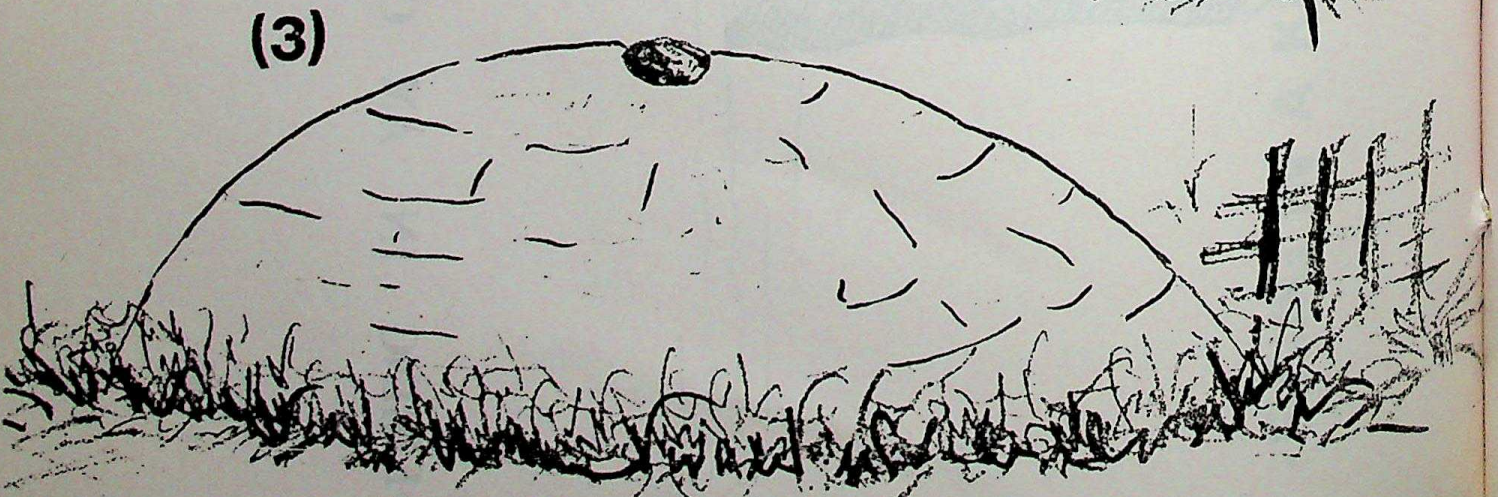
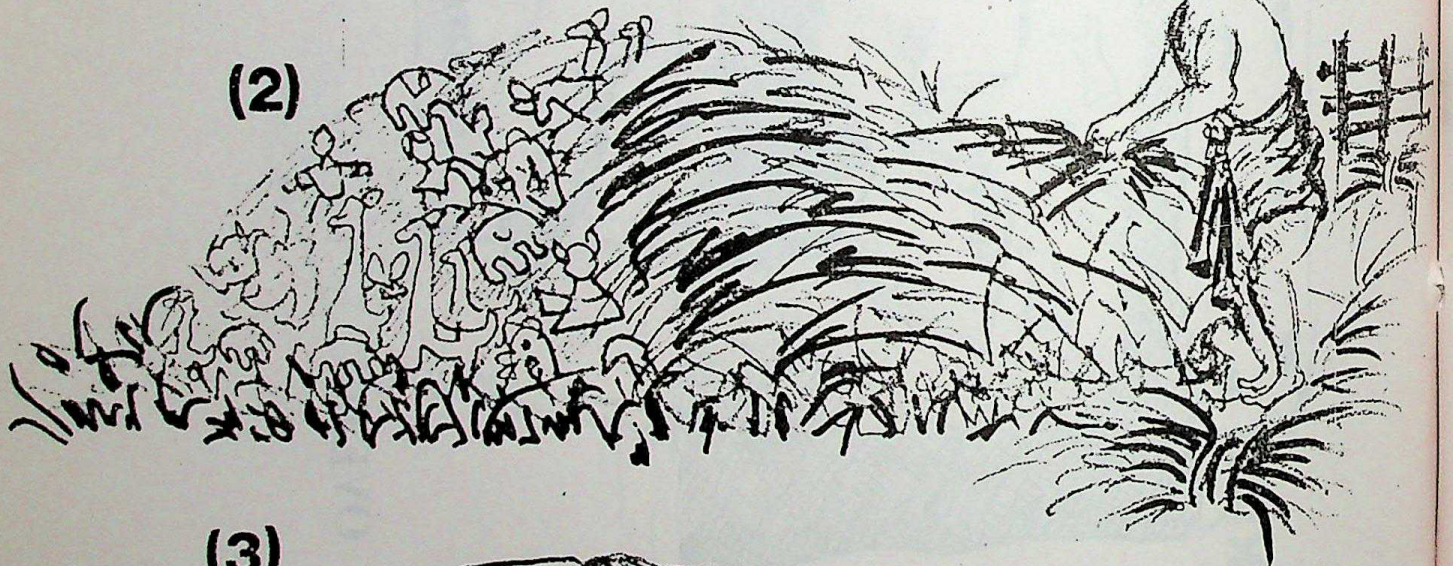
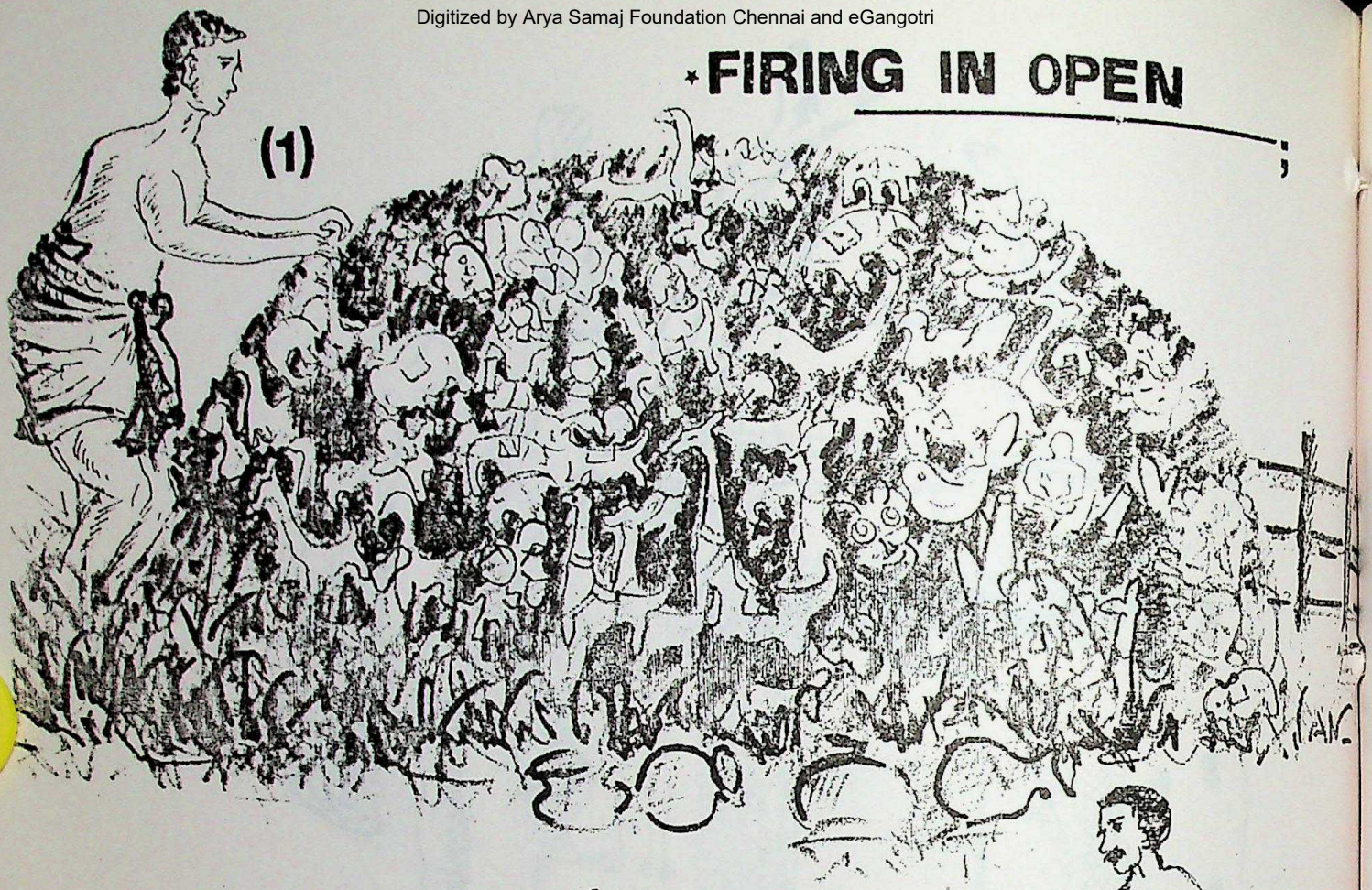




★FIRING IN AN OVEN .



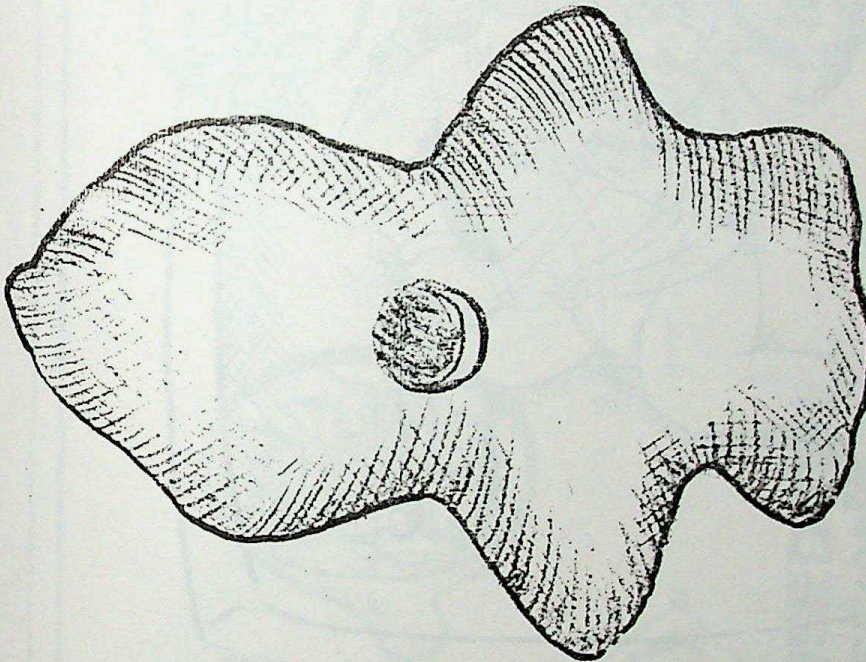
# \* FIRING IN OPEN



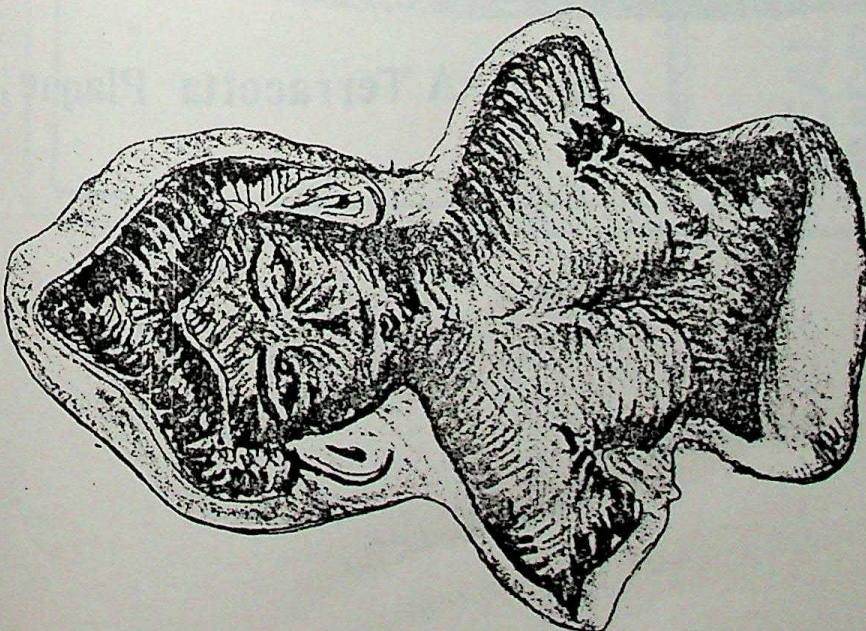




Obverse.  
:★MOULD,  
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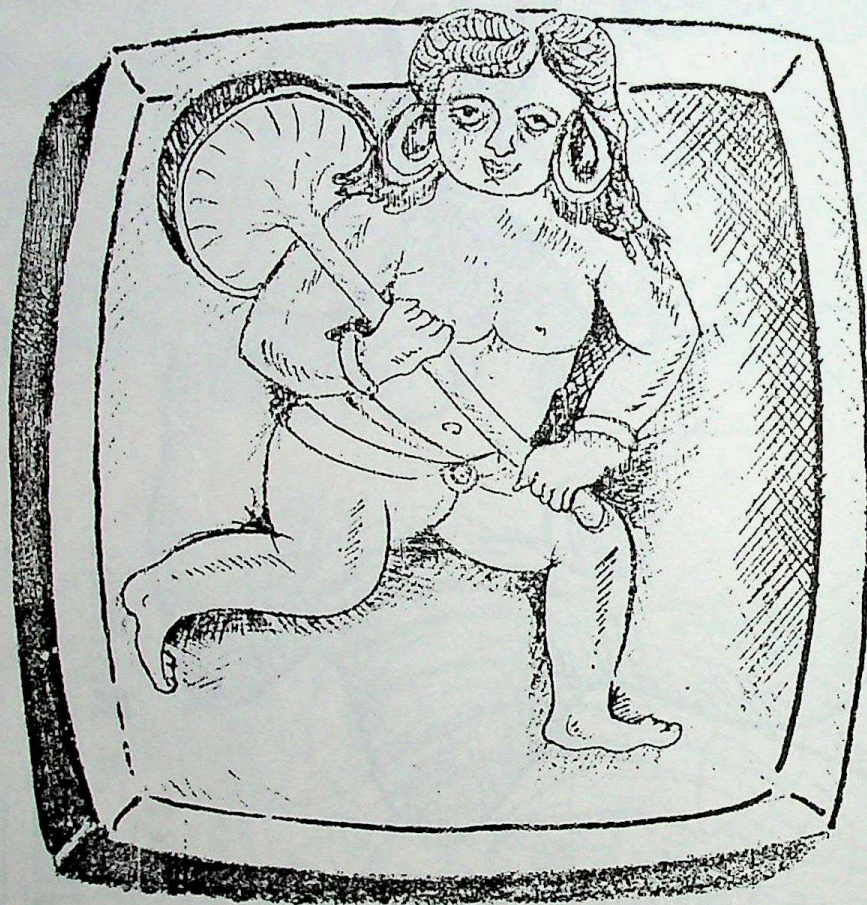
Reverse.



Obverse.

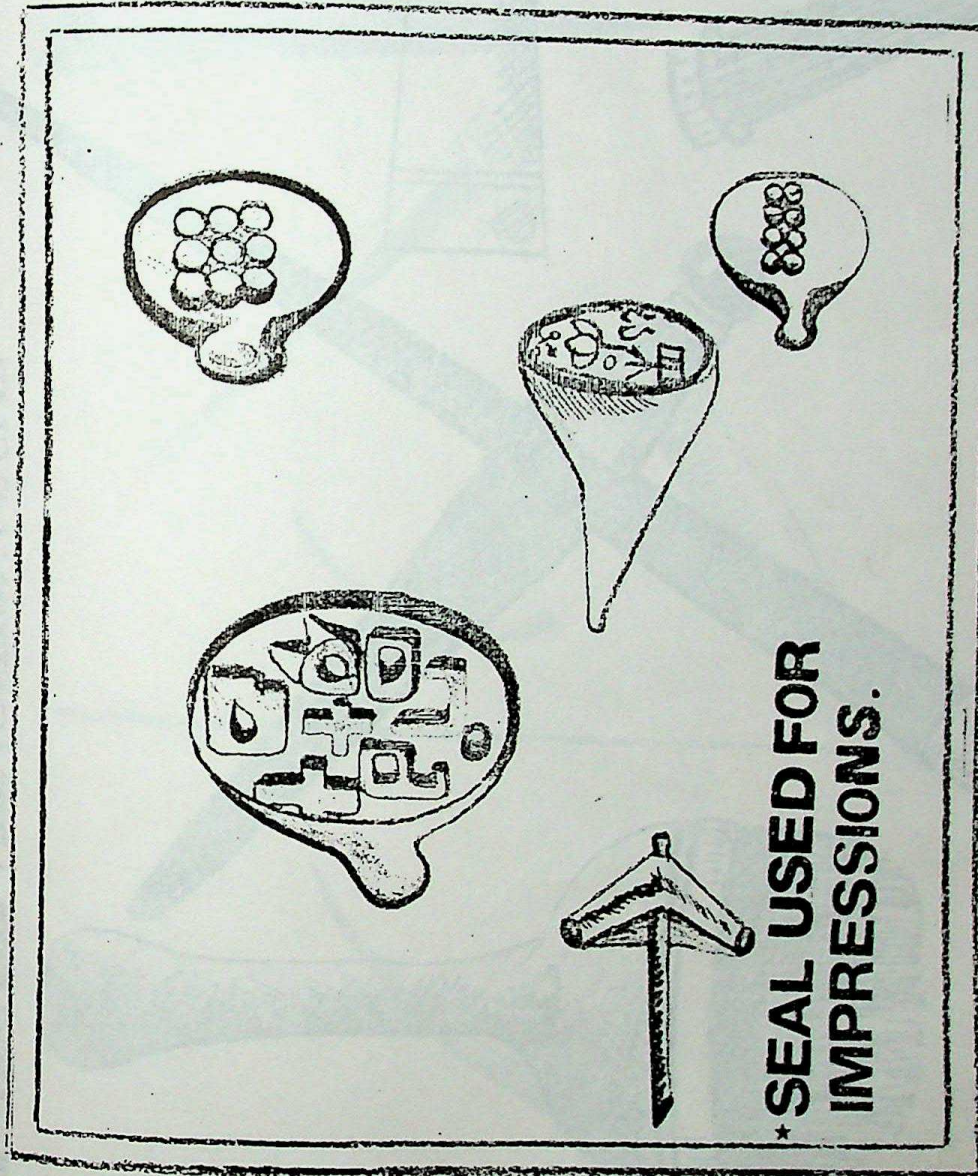
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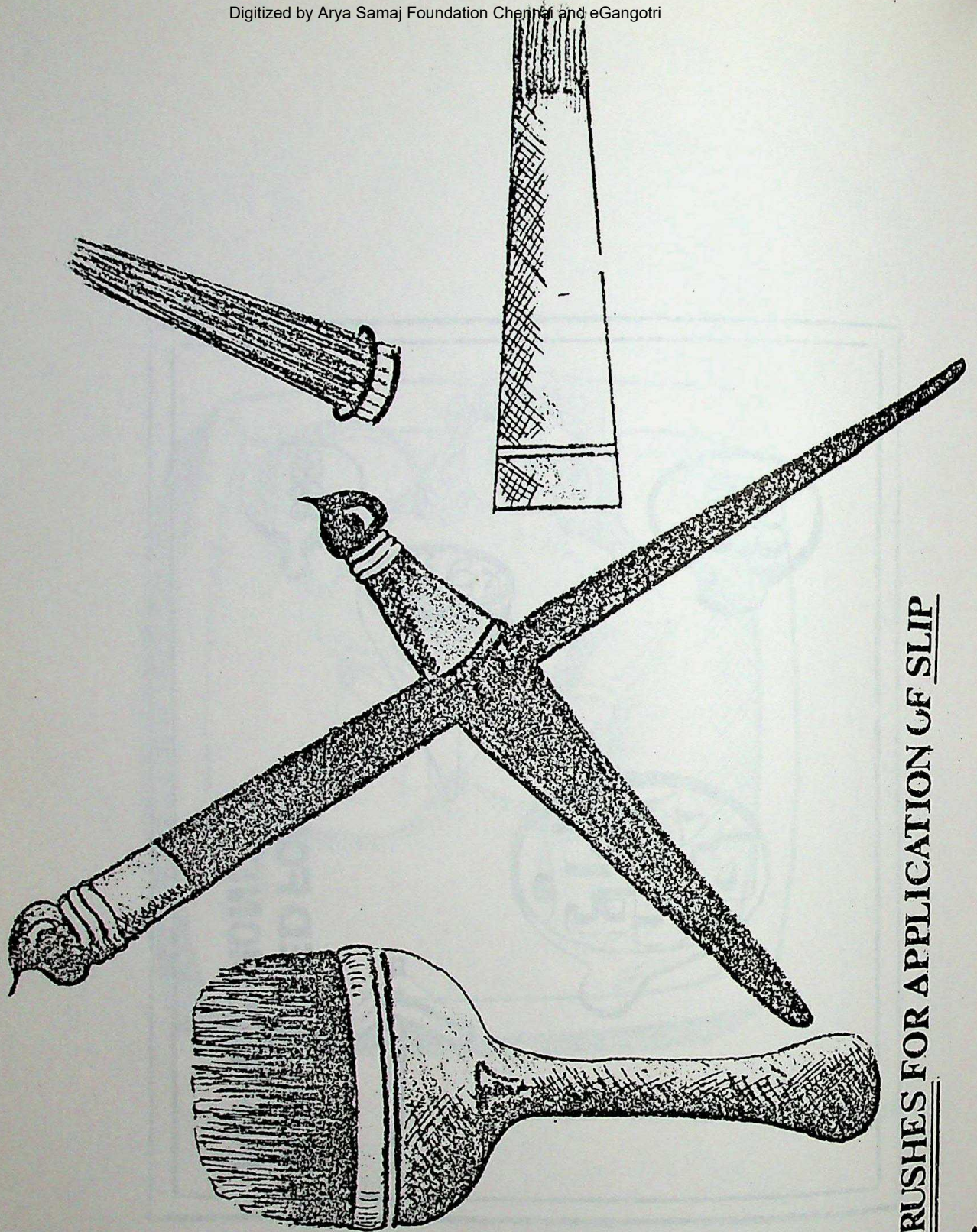


★A Terracotta Plaque,



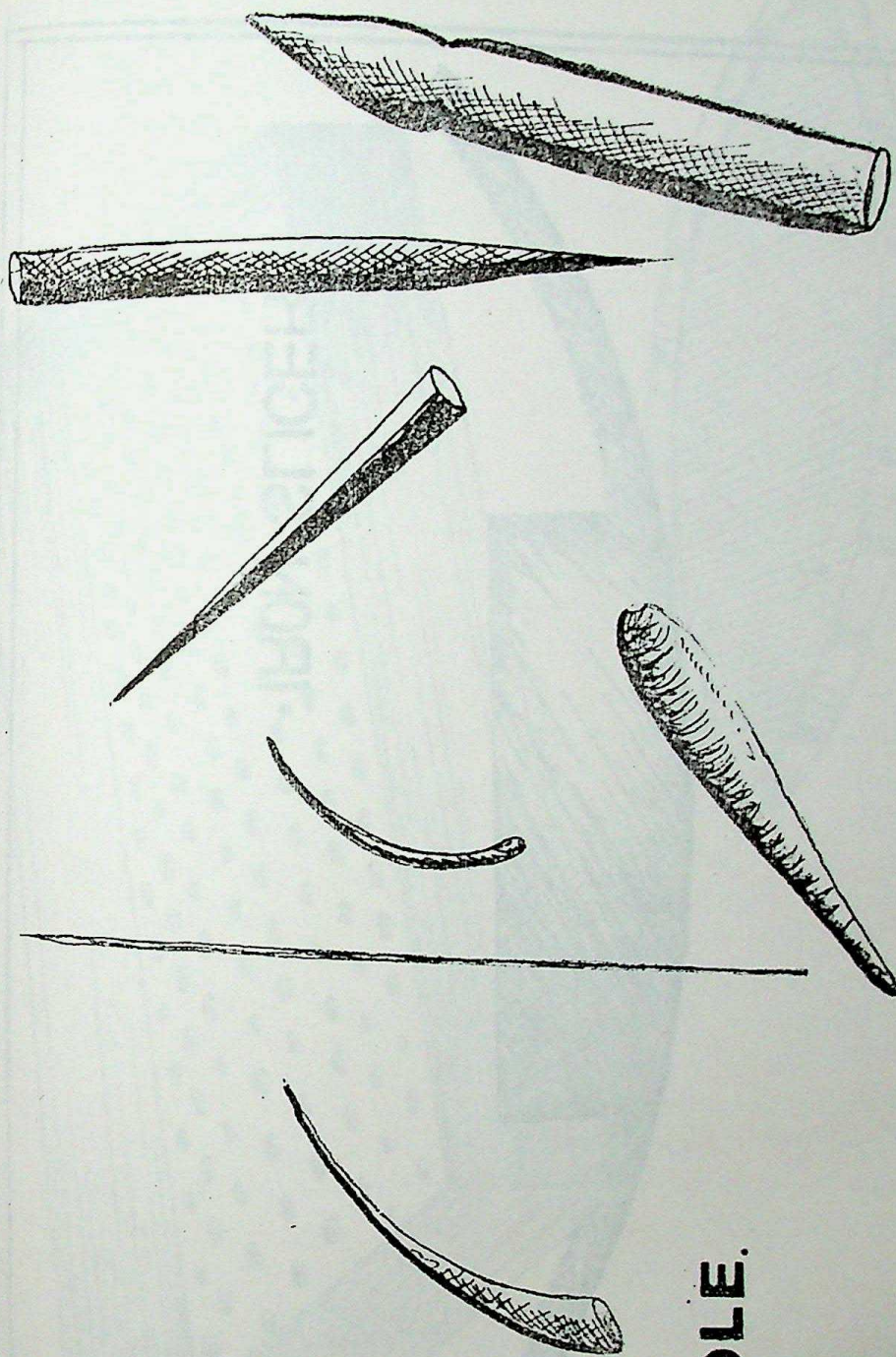






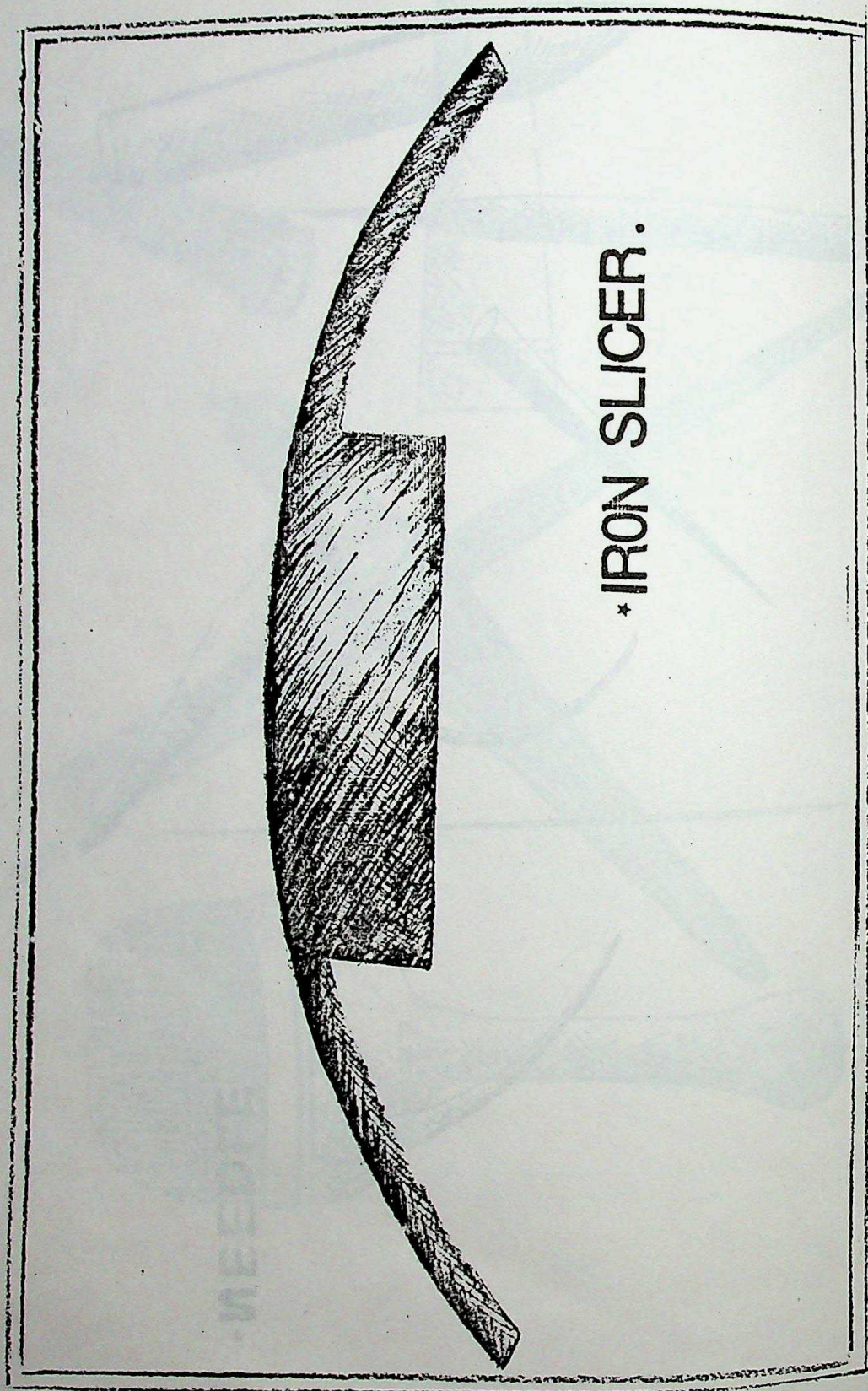
\*VARIETY OF BRUSHES FOR APPLICATION OF SLIP  
OR COLOUR.





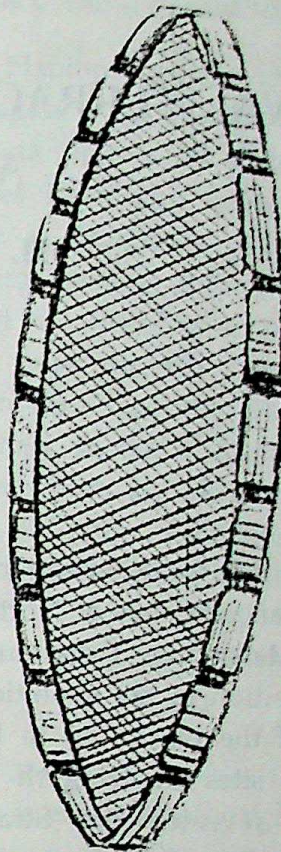
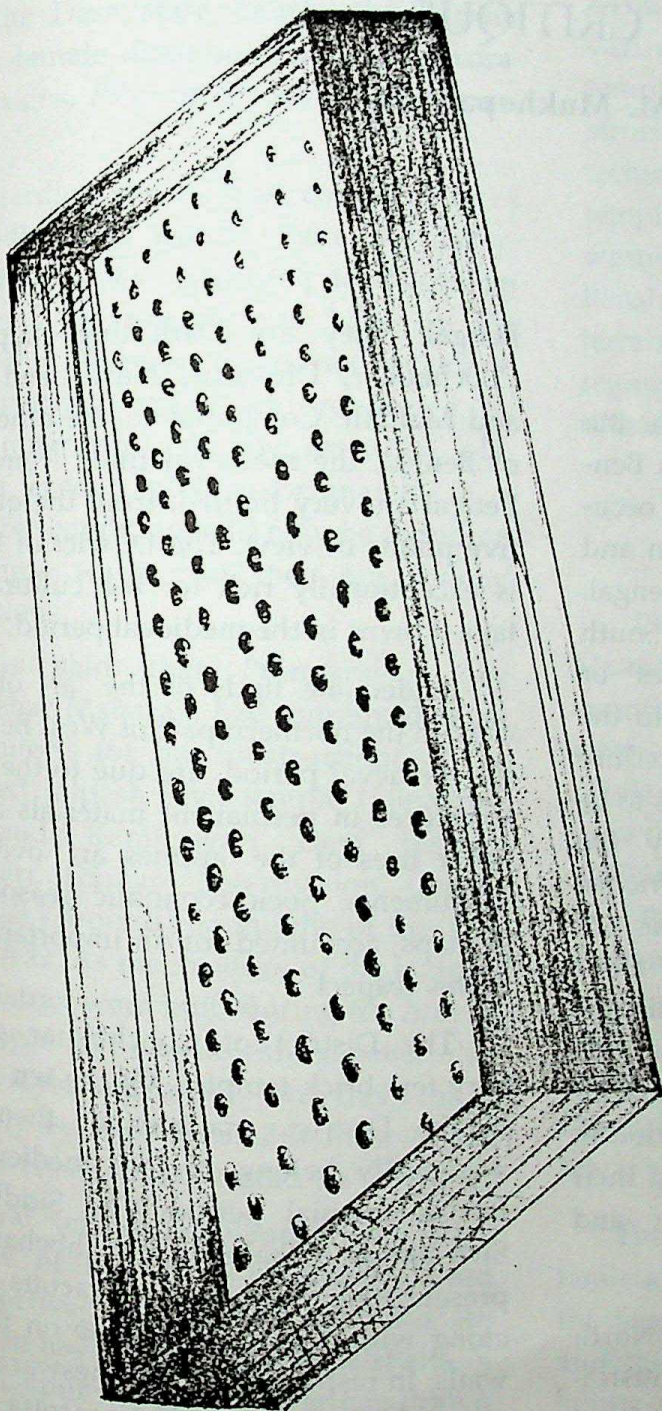
★ NEEDLE.





\*IRON SLICER.





★ BAMBOO & TIN MADE SIEVE.



# MEDIEVAL TERRACOTTAS OF NORTH BENGAL A CRITIQUE

M. M. Mukhopadhyay

## I

Bengal has a rich tradition of terracotta art. Of the ancient sites of North Bengal, Bangarh, Mahasthan, Paharpur occupies unique position in the evolution and development of the plastic art in Bengal. The excavated sites of Bangarh (South Dinajpur Dist.) revealed five 'Strates' or periods ranging from the Mauryas to the pre-Muslim period<sup>1</sup>. A detailed procedure of the manufacture of the clay work is to be found in the *Silpa* texts, namely the *Vishnudharmottara Purana*, *Aparajita Priccha*, *Samarangana Sutradhara*, *Hayasirsa-Pancharatna* etc. The technique of clay modelling, perhaps, does not show any significant break from tradition. In spite of the great cataclysm and emergence of the Culture-complex, since the Sultanate period in Bengal, the humble potters continued their profession to meet their economic and cultural needs of the region.

The geographical situation of North Bengal covers the present six administrative Districts of the Northern part of West

Bengal. They are Darjeeling, Jalpaiguri, Coochbehar, Dinajpur, North and South and Maldah. Compared to the other parts of Bengal, the medieval finds from North Bengal are very limited, from the quantitative points of view. The District of Maldah is exceptionally rich for the cultural heritage it owns in the medieval period.

Inadequate finds of the 'art of baked clay' in the northern part of West Bengal, in the medieval period, are due to the lack of structures in permanent materials and the lesser uses of the 'applies art' over those monuments. Socio-economic reasons also perhaps, accounted for an important factor in this respect.

The District of Coochbehar presents very few brick temples. Of the ten temples in the District, majority of them chronologically belong to late medieval and British colonial period. The Siddhanatha Siva temple (Dhalbadi, Coochbehar) in its present state display few terracotta plaques along with a motif of *mihrab* on its outer walls. In respect of the Siddheswara temple at Coochbehar at least 55 terracotta plaques



on the temple walls had been recorded<sup>2</sup> but could not be traced at present. The plaques are said to have represented both religious and secular themes. Significant of them were the Dasavatara Panels, the Puranic deities, female damsels, floral and decorative designs, *Pikes* or *sepoys* carrying guns etc<sup>3</sup>.

Regarding the date of construction of the Siddheswara temple, there is a difference of opinion. According to Buchanan Hamilton, the temple was built by the Coochbehar Maharaja Upendranarayan and subsequently repaired and renovated by Harendranarayan<sup>4</sup>. A few terracotta plaques in eroded and unfortunately in a deplorable condition, still may be found on the temple walls. But they are beyond recognition.

It is said that Prannarayan, the Coochbehar Maharaja had employed Muslim architects for the constructions of the celebrated Jalpesh Siva temple (Jalpaiguri Dist.) and Kamteswari Devi temple, Gosanibari (Dinhata Sub-division, Coochbehar Dist.) around the middle of the 17th century A.D. As the majority of the temples in the District were built during the time of Prannarayan and his successors, hence, that Islamic style imparted on them may reasonably be explained. But most of the temples were devoid of terracotta works.

Several terracotta plaques and brick structures of the early medieval period ranging between 8th to 13th centuries are reported to have been found at Bairhatta in South Dinajpur Dist<sup>5</sup>. Sengupta has drawn our attention to the six terracotta plaques of

the Pala cultural period from the area<sup>6</sup>.

In Habibpur village and nearby locality at Raiganj (N. Dinajpur Dist.), certain terracotta objects of different types and varieties have also been found. Bhairavi temple at Bindol, is perhaps, the oldest structural remains of the District. The architectural remains of an octagonal black stone temple have recently been traced on the western bank of the Tangaon river at Banshihari, in the S. Dinajpur Dist. Stray terracotta finds are also available from the region. But none of the sites confirm materials of typical medieval date.

## II

The medieval remains in the District of Maldah is exceptionally rich both from the quantitative and also qualitative points of view. Among the host of religious and secular structures of the Sultans of Bengal were the Adina Mosque (1369 or 1374 A.D.) in Eklakhi mausoleum at Hazarat Pandua, the 'Bari Sona' Masjid (1526 A.D.), the 'Qadam Rasul' (1531 A.D.), the Tantipara mosque, the massive 'Baisgazi' wall (supposed to have been a part of a palace precincts), the 'Dakhil Darwaza' (15th Cent.), Firuz Minar all at Gaur to cite only a few<sup>7</sup>.

The characteristic features of the Islamic architecture were the introduction of the *minar* and the minaret, the pendentive and the squinch arches, stalactite and the honey combing, and the impressive half-domed portal.



In the decorative aspect of the buildings also significant development were noticeable. The decorative scheme of the earlier tradition were no doubt continued along with the floral and diaper designs. The structures were beautified with a wealth of terracotta carvings or in bricks. As a consequence, wall spaces both outside and inner, exhibits minute carved brick decorations, glazed coloured tiles and above all exquisitely rich terracotta works.

The Sultanate of Bengal tried to make an effort to identify their administration with the life and culture of the people by using the dominant regional identification of the people of Bengal.

The isolation of Bengal from the rest of India, perhaps, led to the Muslim in Bengal to move closer to the indigenous culture and think in terms of their cultural synthesis.

The urge for Hindu-Muslim synthesis can well be noticed in the ornamentation on the structures belonging to Muslim architecture in Bengal. Even before the emergence of the regional style the process of synthesis had started in the realm of ornamentation of buildings as evidenced from the decorative motifs on the tympanums, *mirhabs* and the *mimbar*.

The Muslim had brought the traditions of the ornamental art works from West Asia particularly *arabesque* and Saracenic. On the other hand, the people of Bengal had a great heritage of artistic activities.

Decorative elements derived from West Asian sources were blended with indigenous ones as also with the representations of the local flower and vegetation to create motifs and designs are often changed to suit the linear arrangement.

The motifs and designs that came in from the pre-Muslim art tradition of Bengal as well as West-Asian motifs and designs have also been accepted as such. Though the decoration of the regional Muslim architecture of Bengal is a heterogeneous collection of motifs and designs derived from different sources, the artists of Bengal were successful in producing an integrated effect both in the individual composite panels and the elaborate ornamentation of an entire wall.

The early Sultans, perhaps, did not accompany artists, builders and craftsmen enough with them. Hence, they had to employ the local builders and craftsmen for erecting the structures or buildings of the new faith.

After settling firmly, the Sultans, perhaps, imported experienced builders and craftsmen mainly from Persia. The two traditions were thus came close in course of centuries, resulted to build a new style of art and architecture as 'Indian in Islamic manifestation.' Marshall<sup>8</sup> and Percy Brown<sup>9</sup> have initiated the problem in depth. To enrich the architecture, new forms, features and decorative ideals were also introduced simultaneously. The buildings should be beautified with wealth of carvings executed mainly in brick or plaster, glazed wares<sup>10</sup>



and finally with colour. The effect was obtained by encausting tiling used sparingly, in some cases colour only. Subsequently, they embellished the whole structure with glistening surface of enamel.

### III

The terracotta finds from different locations of Maldah mention may be made of Eklakhi, Pandua, Gour, Sagardighi, Sataisghara, Mathabari (Habibpur), Kandarani (near Samsi), Jagjivanpur, to cite only a few. The finds are rich in respect of their form and content, in variety and texture, and in style and technique. Besides pottery and terracotta plaques, glazed and painted bricks, porcelain and ornamented brick works of Gaur, Pandua, Eklakhi regions help us to evaluate the medieval traits in proper perspective<sup>11</sup>. We shall examine a selected terracotta finds of medieval Maldah from the collections of the Akshay Kumar Maitreya Museum, North Bengal University<sup>12</sup>.

#### (A) Terracotta human and animal figures

Fig. 1. Bust of a female figure from Eklakhi Dighi is hand modelled applied with dull red slip. Although we classify them as 'angeless' variety, but in the present context the figure may be ascribed in the late medieval period. Incidentally, similar busts have been found in some other sites of North Bengal.

Fig. 2. (a) Head of a ram. Hand modelled. Eyes done with pointed niddle.

(b) Rear part of a ram.

(c) Rear part of a ram rendered in naturalistic fashion as indicated by the short legs and tail.

(d) More or less complete figure of a ram, only the front portion is mutilated.

All the figures have been applied with a dull red slip. These types of ram are very common in early historical sites. From the contexts of discovery it is apparent that the tradition continued in both the proto medieval and medieval period.

Fig. 3.(a) Bust of a mutilated female figure wearing possibly a *sari* like garment. Hand modelled.

(b) Hand-made crude bust of a headless female figure. Strikingly enough similar bust has been recorded at the site of Mangalkot (Burdwan) period-I (c. 1200 to 600 B.C.) In the case of Mangalkot bust the difference is that it is applied with a red slip. The same slip that has been found in the Black and Red ware. Both of them perhaps, represented the Mother Goddess.

(c) A monkey is shown seated in its *haunches* or *asana* with folded palms. The figurine possibly a game object, was a play-thing of the children. It was made out of double mould.

(d) Bust of a female figure in standing posture. The busts with heavy breasts and pointed nipples emphasized her feminine quality. There is an apparent tendency of depicting the figure in



slight *tribhanga* posture, having a slim waist and bulgy lower part. It is difficult to ascribe precise date as the figures have been found from surface collection. But the medieval traits are very much pronounced.

Fig. 4 (a) The object represents the trunk of an elephant and (b) The fragment of a ram. Both the fragmentary pieces are made of dull red ware.

### (B) Game Objects

Fig. 5 (a) Terracotta ball applied in a black slip and (b) The wheel of a toy-cart is of dull red ware. This type of un-spoked wheel has a long tradition that flourished since the time of early and late medieval historical period.

Fig. 6. Pieces or game objects, possibly meant for the 'Bag-chal' game. The game is still prevalent in rural Bengal. Pieces of various sizes have been found. They have a knob for holding. The objects are made of dull red ware.

### (C) Miscellaneous Objects

Fig. 7. Sprinkler heads, some of them are used for *Chilam*. Almost similar *Chilam* have been found profusely from Rajbadidanga and other places assignable to c. 9th to 12th Cent. A.D.

These are made out of mould with having thin fabric. In our examples, two of them applied with a lustrous black and red slip.

Fig. 8 Three pieces toy-cart wheel have also

been found for Eklakhi Dighi.

Nut-shaped bead. They were very common in early historical period.

Fig. 9 (a) Two big size beads.

(b) A stopper or lid of a jar.

(c) Rim of a jar with thick ring and incised marks are distinct.

(d) Rim of a jar bearing thumb impressed ridges.

(e) Foot-rest of a vessel.

Precise dating is not possible. Similar finds have been found from medieval sites.

Fig. 10 (a) Two *net-sinkers* of different sizes have been found from Eklakhi Dighi. They are applied with red ware. Similar sinkers are common in early historical period and even carried in the medieval period also of the two beads, one is barrel-shaped while the other is ring-shaped. The object shows that the fire was used in reducing condition.

### (D) Terracotta Plaques

Used for decoration or ornamentation of structures (temple?).

A female figure plastically shows standing in *salabhanjika* pose [Fig. 11(a)]. The female form is otherwise soft and pliable and demonstrates sense of lithe movement. At the time of execution, terracotta mould might have been used.

The female figure in side profile is



shown holding the stem of a flower [Fig. 12(b)]. The dress she wore has virtually covered her body. Her garment have vertical ridges and folds, tapering at the waist and flowing outwards at the bottom. This was a type of *sharara* which is worn from the waist. Her coiffure is stylistically treated. The figure in all likelihood may be identified as a dancing girl.

The standing male figure is fully clothed in *achgan* with vertical folds [fig. 11(b)]. The headgear is not very clear but it appears as a turban properly tied down. The manly physique with sharp contour is noticeable. He is shown holding a glass clasped between both hands possibly of drinks.

The fragment of plaque representing the lower part of a standing male figure is almost identical to that of the earlier one [Fig. 12(a)]. The noticeable feature in the present plaque is that he wears an waist-band which holds a dagger.

Both the terracotta plaques, perhaps, represent nobles or higher up in the society, as their aristocratic bearings suggest.

#### (E) Brick - Works

##### *Architectural Fragments/Designs*

(Figs 13 - 20).

The decorative brick works project relief work which were probably employed on panels of the *pishtaq* or the mosque's gate and on the *mihrab*. Hori-

zontal patterns and conical floral designs are also noticeable. On the same part of the *pishtaq*, on the vertical band, designs were of numerous patterns.

The symbolic 'sandglass' motif provide a shape of a diamond. Similar type of designs may be noticed on the upper part of the *mehrab*, particularly on the tympanum of the Adina mosque at Pandua<sup>13</sup>.

The extreme corners of the horizontal bands on the top of the architrave [Fig. 13(c)] provides the floral vase motif. This type of design is found in the Tantipara mosque at Gaur.

The motif are decorative vertical bands of the *pishtaq* [Fig. 14(a) and (b)]. The motif [Fig. 14(a)] being probably of the Sultanate period, while the other one is [Fig. 14(b)] having a fully bloomed sunflower motif with stalk encircling it. The motif typically bears the early Indian tradition. The objects suggests that the indigenous motifs played a greater role in decorating the structures. Such types of structures are the hall mark of Islamic architecture.

The brick carving [fig. 15(b)] is having a relief portraying vase motif as found in the Buddhist and Brahmanical structures of early period. Serpentine motifs found from the area [Fig. 16(c)(a)] are extremely interesting as they highlights the regional taste of the period.

The specimen [Fig. 17(c)] is a fragment panel portraying the miniature *mihrab*



in relief, having floral motifs and triangle foliation at the sides. The borders bears the full blown lotus *pettaled* designs, running on all the three sides. The essence of Indo-Islamic art may be clearly traced in this type of motif. The intricate floral motif designs with precision and uniformity are to be found in two panels [Fig. 16(a) + (b)] from our region. They certainly highlight the grandeur of the structure and the aesthetic sense of its builder.

The full-blown lotuses with their petals incised in clear sharp relief are extremely interesting for their plastic quality (Fig. 18).

The lotus motifs are usually provided on the extreme sides of the architraves or *mihrab* within the *pishtaq*.

The brickwork having an intricate motif of the tulip flower was much favoured in West Asiatic countries (Fig. 19). This is perhaps a direct import and must have been associated with royalty. It again featured on the inner portion of the *pishtaq* of a mosque or a tomb.

Some of the designs from the region are characterised by almost 'circular' in shape with multiple pointed edges [Fig (20)]. This types of brick designs are generally used in the '*Dakhil Darwaza*', the massive gateway structure at Gaur.<sup>14</sup> The relief representing a corner plaque with an architectural motif on the band, is a typical specimen of

the Indo-Islamic motif.

#### (F) Painted Bricks

Glazed painted bricks were extensively used on the exterior walls of the structures of Gaur during the Sultanate period. The designs and patterns were an attempt to emulate the buildings of Samarkhand and Herat. Blue and white were used for the purpose of contrast in colour. Other colours like pale-green and yellow provided the colour combination for interior decoration.

In our specimens (Figs. 21, 22) the motifs are floral patterns through geometrical designs which were very common in Persia and Central Asia. The imported floral designs were modified by the indigenous artists/masons to project the regional decorative tradition. The painted bricks also portray the margin drawings which might had some decorative patterns perhaps, used inside the halls.

#### (G) Ceramic Works

Fragments of utensils made of ceramic are notable finds of medieval Maldah under the Sultanate period. The industry was flourished and enriched by the encouragements and patronisation of the rulers, nobles and upper strata of the society is evident. Recent researches suggest that one of the reasons of the development of the art, was the interaction with the Chinese at that time.<sup>15</sup> Colours constitutes mainly were of blue and



green on spotless white porcelain. It appears that the design was painted in the required colour directly, and thereafter the entire vase and the like was coated with a film of glaze, which resulted in most case a lustre. Objects made of porcelin were mainly of dishes, plates, bowls, vases etc. (Fig. 23).

From our discussion above, our understanding of the medieval terracottas in North Bengal in general and Gaur, Pandua and allied locations in particular will reveal certain points. Firstly, the

acceptance and continuance of the typical earlier (Brahmanical and Buddhist) art tradition. Secondly, one may notice certain modification and diversification of the earlier tradition resulted to a synthesis in expression and treatment. Thirdly, invention and/or introduction of certain new elements or idioms in the medieval art forms. Fourthly, in the plastic treatment especially the terracotta plaques of medieval North Bengal were carved out in low relief, compared to its counterpart in Southern and Western Bengal.



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## A NOTE ON TERRACOTTA RAMAYANA PANEL IN THE COLLECTION OF INDIAN MUSEUM

Rita Dutta

One of the major characteristics of the early Indian art of the Gupta and post-Gupta period is the depiction of Ramayana panels. These panels were mostly used for decorating temple walls and are found in different materials, *viz.* stone, stucco and terracotta. The style, form and technique are identical in character. Moreover, the subject matter displays a close affinity with each other. The major theme of this type of panel often involves different stories of the epic Ramayana which were very much popular in the contemporary social life. In some places these panels have been arranged in chronological order according to the epic story, while in some other places they are stray finds. The evidences of both complete and fragmentary stray finds have been reported from different parts of the country. These panels are usually rectangular in shape, sometimes with traces of inscriptions. The distribution, form, content and technique indicate that they belong to a same art tradition. In fact, the major driving force of this art tradition lies in the early Indian narrative art movement. Hence this art

tradition can be treated as a legacy of the early Indian narrative art of the Śunga period.

The recent acquisition of the antiquities by the Indian Museum, Calcutta, includes one such beautiful terracotta Ramayana panel. The panel had been collected from Allahabad (fig.1). It is broken in two pieces, the ACC. No. being 90/213a and 90/213b. Besides its common character with similar finds from other sites, the plaque will definitely throw some light on the chronology and character of the Ramayana panel. The specimen is transversely broken from top to bottom. The larger part contains four figures, of which three are monkey soldiers and one human figure walking to right. The human figure can safely be identified as Lakshmana on the basis of Chhannavira ornament which is a typical identity mark of all the Ramayan panels found earlier from different sites. Generally in the panels, the image of Rama is shown always in front of Lakshmana. But in the present panel, there is only one human figure which means that the image of Rama is unfortunately missing. The figure of Lakshmana in the present



specimen is shown taller than the monkey soldiers. He is carrying a quiver on his left shoulder and is being followed by a group of monkey soldiers. The fragmentary part of the panel contains two monkey figures. The arrangement of figures in the panel has been made in such a way that it gives the impression of war procession. The depiction is invariably connected with the story of recovery of Sita who was captive by a demon king of Lanka. It is evidently clear from the relief that the figures are bold and vigorous. The short curly hair, soft round faces, undulating arms, and their fleshy and delicate curves of the body indicate the Gupta traits. The figures are simple and independent displaying the boldness of composition. The depiction is compact and harmonious with soft and bold figures against solid background. The style of execution, attitude and expression of figures and even the arrangement of Chhannavira ornaments of the present

terracotta are exactly the proto-type of such earlier terracotta panels found in different parts. The only difference and the most intriguing features of the panel is its dresses. Unlike most of the Ramayana panels where the figures are shown wearing dhotis, the figures of the present panel is treated with altogether different fashion of dresses. Here both Lakshmana and monkey soldiers are shown wearing tunic or skirt type short dresses or pieces of cloth falling just above the knee. This shows close affinity with Kushana dresses, because the introduction of tunic or skirt type short dresses are no doubt a Kushana contribution. It appear therefore that the present relief displays neither true Gupta traits nor the Kushana, it rather combines traits of both the periods. Hence, we may tentatively place the panel to Late-Kushana and the early beginning of Gupta period, when the hard line of distinction between their dresses did not develop.



# TERRACOTTA TEMPLES OF VISHNUPUR THE ABODE OF RHYTHM AND MELODY

Barnali Mitra

## Introduction

Vishnupur - once the capital of the Mallas, now a temple city, is known for its artistry in mud, melodious classical music, variegated textiles, colourful playing cards and fabulous folk traditions. The 'land and the temples attracted attentions of the Europeans who were posted in the region for administrative pursuits. Later on Indians, specially the Bengali intellectuals through their writings and on-the-spot survey brought out the colourful chronicle of the land for the curious readers. As a student of history and a performer of Indian classical dance I was fascinated by the architectural style and terracotta carvings of the temples which were zealously erected by the people of the yester-centuries.

Vishnupur, literally meaning the abode of lord Vishnu was the capital of a large territory known as Mallabhum. The geographical area covered by this territory was, besides the entire district of Bankura, the extensive regions of the districts of Burdwan and Midnapore. In the cultural

history of Bengal, Vishnupur stands unique for its diversified temple architecture. Politically, Vishnupur enjoyed more or less a sense of independence for centuries. Here ruled a dynasty which basically derived its sustenance from its own soil supported by a group of indigenous people. Apart from Navadwip, Vishnupur was the only place in Bengal which remained ever-smitten with the emotions and passions inculcated by the doctrine of love of Sri Chaitanya. This is reflected in the narrative panels which served as embellishments on the terracotta temples of Vishnupur.

## I

### Rulers of Vishnupur

The kings of Bankura ruled over the country called *Mallabhum*, a geographical area consisting of all the *thanas* in Bankura except Chatna. Mallabhum means the land of the wrestlers and there is a legend that the first *raja* received the title *Adimalla* for his skill in wrestling. Opinion vary as to the origin of the *mallas*, a section of scholars saying that the *mallas* were *kshatriyas*.



Another group maintains that the name *malla* is associated with a low caste community, the *mals*. The story goes that, in the year 102 of the *malla* era i.e. in 695 A.D. a prince of Northern India was travelling with his pregnant wife on his way to the temple of Jagannath of Puri. He left her in a forest in Laugram, six miles away from Kotulpur. Ultimately a male child was born there and was reared in the care of a *kayastha* woman. When the boy attained fifteen, he had no equal in wrestling, the Raja of Panchamgarh honoured him with the title of *Adimalla* - a unique wrestler. *Adimalla* became the chieftain of the area of Padampur which is now near the police outpost of Jaypur - eight miles away from Laugram. He won a neighbouring chief Pratapnarayan of Jotbihar. For thirtythree years *Adimalla* reigned at Laugram known as *Bagdi raja* and was succeeded by his son Jaya Malla who won the Padampur fort.

Jaya Malla extended his dominion on all sides and finally removed the capital to Vishnupur. His successors Kalu Malla conquered Indas, Kau Malla defeated Kakatia, Jhau Malla overcame some other and Sura Malla subdued the kingdom of Bagri. All these kings were known by the title of *malla* or *mallabhumnath* i.e. lords of Mallabhum or Mallabari. Their family records show them as exercising full sovereignty within their domains and independent of all foreign powers. The fortyninth *raja* Dhar Hambir flourished in 1586 A.D. and muslim vice-roys and the suzerainty of Bengal gave their acknowledgement to the *mallas*.

Tradition records that his successor Bir

Hambir was as pious king as he was powerful and tyrannous ruler. From the texts like *Bhaktiratnakara* by Narahari Chakravarti and *Premavilasa* by Nityananda Das, we know that Vaishnava guru Srinivasa Acharya with his devotees left Vrindavan for Gaur, as instructed by Jiva Goswami with a number of Vaishnava manuscripts including the *Srimadbhagavatam*. Vir Hambir was wrongly informed about them and ordered his men to rob them off. Receiving the news of looting of the sacred texts, Krishnadasa Kaviraja, the author of *Chaitanya-charitamrita* died. But Acharya Srinivasa Goswami could influence Vir Hambir with the recitation of the *Bhagavadgita* and the latter was converted into the fold of Vaishnavism. He introduced the worship of Madamuohan and Kalachand. It would appear from records that the reign of Vir Hambir extended between 1591 A.D. and 1616 A.D.

At a modest estimate the *mallas* and their successors enacted on the stage of Mallabhum for approximately one thousand years. If credence is given to their legendary origin, the *mallas* started dominating the scene in 695 A.D. and the last temple dedicated by the *malla* chief dated to be 1758 A.D. But their temple building activities began in the first quarter of the seventeenth century A.D., Mallesvar temple was constructed in 1622 A.D. The name of its builder was described as Vir Singh. Raghunath Singh I succeeded Vir Singh I and his reign fell approximately between 1643 - 1656 A.D. At this time, the architectural and sculptural excellence of the



temple reached its highest level as the most prominent terracotta temples of Shyamrai of 1643 A.D., Jor Bangla of 1655 A.D. and laterite Kalachand of 1656 A.D. were set up by Raghunath Singh 1. Shyamrai temple is a valued treasure of the Hindu art and ranks as one of the best temples in the late middle ages of Bengal. The immense height of its plinth is a peculiar characteristic feature it is second oldest temple of Vishnupur. Since the time of Hambir who also built a wonderful pyramidal work, Rasamancha, Vishnupur was gaining a distinctive status in Sanskrit learning and north Indian classical music which was accelerated during Raghunath Singh I's rule. Next Malla king Vir Singh 11 built the present Vishnupur fort and excavated eight big tanks called Lalbandh, Krishnabandh, Yamunabandh, Kalindibandh, Ghantabandh, Shyambandh, Vir or Pokabandh and Choukabandh which relieved Vishnupur from chronic water crisis and formed a kind of water fortification. He was a patron of *ekaratna* laterite Lalji temple of 1658 A.D. His wife built two laterite temples in Vishnupur in 1665 A.D. viz. a *chararaina* Muralimohan temple and *pancharatna* Madangopal temple, the latter being the biggest of all the temples of Mallabhum. Next king Durjan Singh patronised another remarkable terracotta temple in Vishnupur i.e. *ekaratna* Madanmohan temple in 1694 A.D. Durjan Singh ruled from 1678 A.D. to 1694 A.D. Next ruler Raghunath Singh 11 ruled between 1694 to 1730 A.D. who patronised *ekaratna* laterite Gopal temple at Patpur in 1703 A.D. He was a great patron of Indian classical

music.

Actually the *malla* power started to decline from the time of Raghunath Singh 11. The process was accelerated by the succession of inefficient rulers engaged in internal quarrels, extensive Maratha inroads in *malla* territories and the rise of neighbouring *zamindars* like the Burdwan raj. The next king who ruled between 1720 - 1745 A.D. was Gopal Singh, a pious prince. He issued an order that all of his subjects should every evening count beads and recite the name of Hari which earned a curious fame as "*gopal singher begar*". There is a legend that when his kingdom was attacked by Maratha chief Bhaskar Rao, he advised his soldiers and subjects to pray to Madanmohan, the city god and to chant the name of Hari instead of fighting. It is said that Madanmohan personally appeared and fired from two big canons named *dal-madal* and repelled the invaders. His son Chaitanya Singh fled from Vishnupur with the family idol of Madanmohan when Mir Zafar Khan attacked his kingdom. The idol found its way to Bagbazar in Calcutta. Gopal Singh built three laterite *ekaratna* temples to the south west of Lalbandh in and around 1726 A.D. known as Jor Mandir. Near Lalbandh, we know of three more *ekaratna* laterite temples - Nandalal and Radhagovinda temples built in 1729 A.D. as also Radhamadhav temple established in 1737 A.D.

The date of Chaitanya Singh is uncertain. From his inscription on the *ekaratna* laterite Radheshyam temple of 1758 A.D. we know that he might have ascended the



throne from that year or earlier and ruled till the Mallabhum estates were sold away in 1806 A.D. for arrear of revenue. Two main factors were responsible for the decline of the *malla* power. Firstly, it was becoming difficult for Mallabhum to remain independent as the contemporary political scenario of Murshidabad was changing fast to become stronger with the rise of its satellite power, the English East India Company. Secondly, the rivalries with the neighbouring landlords like Burdwan raj affected the broader current of contemporary politics of Bengal.

## II

### Temples of Vishnupur

Among the temples erected by the *malla* kings in Vishnupur, we can mention of Shyamrai Jorbangla, Radheshyam and Lalji which are located within the fort area. Most of the remaining temples like Kalachand, Radhamadhava, Jor Mandir, Radha Govinda, Nandalal are located on the south and south-west banks of Lalbandh. Other temples like Madanmohan, Muralimohan, Madangopal, Malleswar are located in the north of the fort while the glorious Rasamancha is located far to the south of the fort, almost in the centre of the town. Besides these, there are some other temples in Vishnupur which are comparatively modern. These are the temples of Mrinmoyee, Chhinnamasta and Sarvamangala.

In Vishnupur, there are now only twenty-nine temples and fourteen other

ruined temples. Among these temples, only fifteen have no dedicatory inscriptions. All these inscriptions are dedicated to lord Krishna and Radhika but the Malleswar temple inscription is dedicated to Lord Shiva. The god Krishna is described here as Lalji, Madanmohan, Shyamrai or Radharamana. In these inscriptions, temples were called as *mandira* and *saudha*. The reckonings often referred to in the inscription are either *saka* or *malla* or Bengali era *san*. The artisans and masons responsible for various designs and embellishments of high or low merit are known from the inscriptions as *vevartti*, *mehatari* and *paricharaka* i.e. supervisors, *bhaskara* or sculptors *ankay niyukta* or designers, *silpin* or artist, *lekhaka* or writers who had shaped or cast certain terracotta writings. In Shyamrai temple which was a novel experiment and achievement in architecture and terracotta embellishment, names of masons and artists were mentioned in between the decorative plaques. Those were Sri Gangavallabha Das, Sri Vishnudas Sarkar, Sri Mohan Das and Sri Mathur Das.

An interesting feature of woman's participation in the temple building activities deserves special mention. While analysing the data put forward by twelve temple inscriptions from Vishnupur we observe that a group of female folk are found actively associated with the construction as well as patronisation of these abode of the gods. From the inscribed records, it is evident that among five noble ladies such as - Chudamani, Siromani, Sanjna Manik-yavarsi, Vrajamani and Hemalata or



Sundaramata, first four were queens, the other was the daughter of a great Vaishanava guru. These celebrated women dedicated five temples, namely Muralimohan (1665) Madangopal (1665) Radhavinod (1659) Jormandir (1726 A.D.) and Radharaman (1587) respectively. This shows the prominence enjoyed by the ladies in the then society. It is also presumed that female masons or wives of the masons were engaged in the work of construction of temple. The word 'kamina' or 'kamila' mentioned in the inscriptions on Shyamchand temple leads one to this conclusion.

In Vishnupur, there are two types of temples - some temples are built of laterite having stone carvings and stucco designs; fourteen temples belong to this category. The other group of twelve temples are made out of brick with terracotta decorations. The prominent temples were lavishly decorated on four sides and even the inner walls of the porticos have been covered with reliefs. Otherwise in most cases, the frontal facades were chiefly decorated while a large part was left bare except for a few rows of geometric designs. Apart from these, there is a very interesting and rare piece of building - the Rasamancha. It is said that this pyramidal pavilion was used for housing idols of lord Krishna and Radha brought from other temples during *rasa* festival and the *malla* kings used to play dance of *rasa* with queens following the blue god of love, his fiancée and the *gopinis*. Instead of *rekha deul*, the *malla* kings preferred the hut style and the new pinnaced type with curved cornice - it was

the *gauda* style appropriate for *gaudiya* Vaishnavism and with it went the terracottas - though they found their way on the *rekha deul* as well.

The temples of Vishnupur like their counterparts elsewhere in India also mirrorise the contemporary society - economic and cultural life of the people in action, warfare, religious pursuit, dance and music. The Vishnupur temple complex is a rich repository of literary contents translated into visual forms, replete with iconographical details and stylistic exuberance. It has been proved that the architectural style derived its influence from the Nagara traditions. Obvious resemblance of Rajasthani and Mughal art tradition is observed in dress and costumes. The ancient and medieval literature as well as canonical prescriptions of *nritya*, *nritya* and *natya* inspired the sculptural details. Besides, elements of indigenous folk traditions are also discernible. In a word, both Hindu, Islamic and European artistic trends can be noticed on the figural motifs, geometric designs as well as on floral decorations.

Decorative bricks and terracotta plaques are an integral part of the architectural scheme of the *malla* temples of Vishnupur. The *Mayammatapurana*, a canon of *Vastushastra* specifies that the earth selected for bricks should be of uniform colour and soft texture free from extraneous items like sand, pebbles, roots and bones. It should be mixed with water and vigorously kneaded with one's feet. It is also said that the earth mixture be added with milky juice from the bark of the fig, mango



and neem trees. After a month of kneading, the bricks can be prepared, dried and evenly fired. It is also said in the *Mahanirvanatantra* that he who builds a brick temple shall live in ten heaven of gods, a hundred thousand crore of years, which is why, the Indian kings patronized the brick temples to perpetuate their glory on earth and attainment of eternal bliss in heaven. The bricks used in the temples of Vishnupur vary in size from approximately 9.5 inches in length to 6.75 inches. In addition to the standard shape which is generally rectangular, some are flat and long and others are triangular. The number of the terracotta plaques on the temples of Vishnupur, at present available, have been counted during the documentation work continued by the Archaeological Survey of India. At a rough estimate there are approximately 27,000 plaques on two temples (Jorbangla 15,000 and Shyamrai 12,000) of which 21,000 plaques have so far been properly documented (1994 report from ASI).

### Dance in Bengali literature

Indian classical dance is divided into five types of graceful school or style with different techniques, textures and interpretations: Kathakali, Bharatnatyam, Kathak, Manipuri and Odissi. Among these, Kathakali and Bharatnatyam originated in the southern part of India, Kathak is based in northern India and Odissi and Manipuri developed in the eastern and north eastern part of India.

The dancers speak an identical lan-

guage of basic technique throughout India though there are significant variations in interpretations. Broadly the technique of dancing is classified in two divisions-pure dance or *nritta* and dancing with miming and gesticulation or *nritya* or it can be called as *angika-abhinaya* i.e. pure dance with nine aspects of emotional sentiment, or *navarasa*. We do not find any such classical stream which is said to have originated in Bengal but there existed various folk style of dance movements in this region although literary evidences tend to prove that dance activities became a part of the court life in Bengal.

The seventh century historical prose *Rajatarangini* by Kashmiri poet Kalhana mentions the dancing girl Kamala of Bengal who was performing a dance recital at the Kartikeya temple following the injunctions of Bharata's *Natyashastra* (*kartikeyaniketanam / bharatanugamalakshya nrityagitadishastravit*). In *Ramacharitam* by Sandhyakaranandi also we notice ample reference to the dance in Bengal.

A distinct reference to dance and music in Bengali literature is found in *Charyapada* of about 10<sup>th</sup> century A.D. *Charya* no. 16, stated that Dombi alias Krishnacharya was dancing on lotus with sixty-four petals along with Bhagavati Nairatmya (একশো পদম চৌষটি পাখুরী তাঁহি ছোড়ি নাটয়ে ডোখি বাপুড়ী). The *charya* no. 26 describes the dance activities of Vajrayana Buddhist god Heruka set to *raga patamanjari*, and a musical instrument *heruka vina*. It is also said that a *buddhanataka* was performed in accompaniment of music and dance, the



latter was termed as *vajrapadanrityam* according to the commentary in the *Charjyagitikoshavritti* by Munidatta. The composer of the *charyya* was Vinapada.

In the anthological text *Saduktikar-namrita* of the 12<sup>th</sup> century A.D. a verse dealt with dance in general which was attributed to Umapati Dhar, the court poet of Lakshmanasena, the king of Bengal. The second verse of the *nritya* section described the bodily movements of the dancers performing the *lasya* choreography. Vidyapati, the famous poet of Mithila devoted a section on dance in his *Purusapariksha*. The *Mangalakavyas* of the 17<sup>th</sup> century, particularly the *Manasa-mangala* mentioned the dance activities of Behula. From the foregoing account it is clear that dance was popular in Bengal since 7<sup>th</sup> century A.D. and the tradition continued.

### Music in Bengali literature

The songs of *charyagiti* were unparalleled in the history of Bengali literature - all these *gitis* or songs were sung on particular *ragas* and written in different *matras* and speed or *layas*. These songs were made to describe Buddhist *sadhana* and life style or *charya* of that period. These *charyas* afterwards influenced also Vaishnava songs and *padavali* etc. The *charya* songs couched in *sauraseniprakrit* language has been sometimes influenced by Maithili *dohas*. There are some *ragas and talas* used in *charyagiti* of 9<sup>th</sup> - 10<sup>th</sup> century A.D. Most of the *ragas* of the *charya* are by now extinct and some of them have been changed. It is believed that the musical note 'dhri' was taken from *charyagiti*

which ultimately boiled into *dhrupada* or *dhruvapada*. Vidyapati mentioned *raga rasavanta* which was performed during *rasamandala* dance when the beautiful damsels danced to their hearts' content and played on *rababa*, *mahativina* and *kapinasha* musical instruments. (রসিনীগণ রাস রঙ্গি নটই.... রাহী রাহী রাগ রচয়ে রাসবন্ত.... রততী রবাব মহতি কপি নশ) *Dhruvapada* or *Dhrupada* or *nibaddha prabandha giti* originally began at the court of Gwalior in the fifteenth century A.D.

But with the decline of Mughal power the noted musicians of Seni school did not get much support from the emperor. They began to seek refuge in the durbars of different Muslim nawabs, Hindu kings and affluent landlords of Onda, Betiya, Hooghly, Vishnupur and other parts of Bengal. Thus Vishnupur emerged as a new centre of *dhrupada* revival of Indian music. The contribution of Vishnupur towards Indian music is best exemplified by its *dhrupada* songs which earned her a recognition of being a seat of novel musical *gharana*. A host of vocalists of next generations contributed their mite to develop this school of music.

### Dancing figures on terracotta panels

We will now study the terracotta panels of Vishnupur which illustrate the theme of Indian dance and music to some extent and at the same time will like to analyse their special characteristics.

Krishna has occupied the major space on terracotta panels in the *dhanupada*, *kumbha* and *kunchitapada* postures. The god



is mainly holding flute or playing on *madala* or *mardala* by both hands. Other gods and goddesses are seen in some of their typical poses, for example in Shyamrai temple, Saraswati holding her Vina, is standing in *dhanupada*. In the *Rasamandala* scene on Shyamrai temple, Krishna stands in the centre in *dhanupada* playing his flute in *tribhanga* with Radha and *gopinis* in *samapada* and in other larger circles Krishna in the same stance is encircled by *gopinis* who dance in *kumbhapada* locking each other hands in *urdhavahu* position. In one plaque of the same temple Krishna is dancing in a *paravadarpana* posture of Odissi dance style.

The basic standing position of Odissi dance is *chauk*, a *sthanaka* which we find in Jorbangla temple on a plaque of Krishna legend where the blue god is bending down in *chauk* and both of his hands are placed upwards near his head. Actually *vaishnavas* in ecstasy used to dance often in this position, keeping both of their hands above, which can be explained as praying for *moksha*. In the same temple, there are two male figures with long matted hair in dancing attitude again with both hands upwards and in *janurashrita* position. In some other plaques Krishna and other *gopinis* are dancing in *kumbhapada* and some in *kunchita* with *madala* in their hands i.e. in *mardala* position. In Jorbangla again, a group of sages with matted hair seat in *udbandhani* position while in front of them one *sevika* is standing in *samapada* and *anjali mudra* i.e. a *sanjukta hasta mudra* according to *Natyasastra*.

In some panels at Rashmancha, musicians are noticed holding their instruments in *abhanga* or *bibhanga* while three *gopas* are dancing in *ayatamandala* but their heels are up, one half bend in *kumbhapada* and another in *kunchita* their heads are in left profile which is *paravritasira* and looking downwards i.e. *avalokita dristi* with their right hands little upish and left are downwards in *chayanika mudra*, according to Odissi style.

In Madanmohan temple there are some panels with *gopas* and a few *gopinis* playing musical instruments like *madala*, duff, flute, *swaramandala* etc. and some dancers including Krishna are dancing displaying *ardharechita*, *dandapaksha* and *vivrita karanas* but mostly *rechakas* or fragmented frogs of a part of a *karana*.

On three panels in the interior wall of the Madanmohan temple, Radha and Krishna are seen in intimacy, closely embracing each other. In one Krishna is trying to cajole Radha who is standing cross-legged gesticulating apparently a dancing pose holding her right arm above, while the left arm kept in an angle as if resisting Krishna to touch her bosom. According to the exponents of Odissi dance style the stance of Radha in this particular posture can be identified with *pinapayodhara* flexion of the body. In the second panel, Krishna is trying to pursue Radha to yield at his desire, entangling her by his left arm, the palm of which rests on the breast of Radha. The leader of the *gopinis* turns her face from Krishna who was intending to kiss the beloved. This bodily movement of the lov-



ing couple reminds one *the yugala milana* composition. In the third panel, Krishna has succeeded in winning over Radha, lifting her chin in an attempt to kiss her. The couple is exhibiting the *yugala milana bhangi* which reflects playful aspect of love union of Radha-Krishna.

The study of the sculptures associated with dance and music in the temples of Vishnupur bring to us a continuity of the performing art traditions, practised in Bengal. The swaying movements of the figures engaged in dancing as represented in the *rasamandala* scenes and elsewhere, the graceful gait of the female dancers, the nuances of the body, various stances, reveal a variety of dance motifs in the terracotta art.

So we can say in Vishnupur terracotta we have seen the extreme usage of *dhanupada*, *kumbhapada* and *kunchitapada* various *bhangi* such as *chauk*, *tribhanga*, *abhanga*, *bibhanga*s which are base of Odissi dance, but it is notable that there are not much variety of *hastamudras*. But these poses and postures, as a whole betray an interesting similarity with Orissan sculptures and the geographical proximity of Bengal and Orissa led to develop a common attitude towards performing arts. On these plaques, there are some musical instruments played by different *gopas* or *gopinis* and Lord Krishna. These are flute, lute, various kinds of *damaru*, *sankha*, *mridanga* or *madala*, *duff*, *nakara*, cymbals and some others. These traditions harmonised in the land of music at Vishnupur established a special style of

performing arts for which Vishnupur can boast of for centuries.

### Musical instruments on terracotta plaques

We have already said that the Rasamancha was the place of *rasalila* where dancing was performed in accompaniment of music and dance. So it was not unlikely that a few plaques depicting the musicians with different instruments will adorn the walls of this Rasamancha. The female musicians are seen here with small *kachchapi vina*. In Shyamrai temple, there is panel showing a group of female musicians or *gopinis*, playing Indian lute. At Jorbangla temple Narada the all time devotee of Vishnu is found seated on his vehicle, a seesaw playing his *vina*. In Madanmohan temple, we notice a panel of female musicians playing different types of *vinas* decorated with various motifs. Flute is common on Vishnupur terracotta plaques as the theme is the life of Srikrishna who always keeps flute or *bansuri* in his hand. In Jorbangla temple, where we find in a plaque Shiva, seated on his bull Nandi, playing *singa* or buffalo horn holding it in his left hand while his attendant Bhiringi is holding a typical *singa* which normally was blown in war-field in ancient time. At Shyamrai, Vishnu is holding *sankha* by his right hand. Charles Burney, History of Music, Vol.I, p.487, in his book mentioned that originally a flute is made of *the shankha* or conch-shell of skin bone of an animal and it seems, as if, the wind instruments of the ancient times, have been long made of such material. In the Madanmohan temple of Vishnupur, there is a panel of



soldiers, decked in European dress, one blowing a *turi* which might be a clarionet and look like our Indian *sehnai* with reeds.

The most ancient *anaddha* or ideophonic Indian instrument used mostly in terracotta temples is *mridanga*, usually played with classical songs like *bhajans*, *kirtans* and other sort of dances. In Vishnupur, we find *mridanga* in almost all the temples as it is the part and parcel of *rasanritya* and *kirtan*. Another *anaddha* instrument *dholak* is also present. Generally it is used to herald public announcement, to mobilise community, to lead processions and ceremonies. In Jorbangla temple, a *dholak* hanging from shoulder of the player is sounded with sticks.

*Naqara* was originally created by covering a hollow wooden piece by animal hides, later on the hide on the top is tied with leather straps. The wood subsequently was replaced by brass or copper. A big *naqara* sounded by the drummer striking with two sticks find place on a *Ramayana* panel at Jorbangla temple. Of much interest are a pair of *naqara* beaten by a soldier with two sticks to sound differently - the right side called *madin* or female and the left is *nar* or male. This royal drum familiar in north India and is normally used in folk dances, religious ceremonies at *nahavat-khana* to announce royal arrival and departure, royal order and victory and known also as *jayadhakka* or *jaydhak*.

*Dambaru* or *damaru*, the oval glass drums centrally cupped together, is also

noticed here as a favourite musical instrument of Shiva and his disciple. Lord Shiva in Jorbangla temple is sitting on his mount holding *damaru* by his right hand and blowing horn by his left hand. In Rasamancha and the Madanmohan temples we find musicians with duff which is also a very popular ideophonic instrument of India used by the commoners.

In the Jorbangla temple, we notice a person playing a *kansar* or *kansi* in accompaniment of a *dhak* during a procession. In Shyamrai temple, there is a plaque which shows Srikrishna dancing and two *gopinis* playing metal clappers or *karatal* which is bigger than *mandira* and is used to be played with both hands held by independent cotton chords. *Khanjani* is also a common and popular instrument throughout India which goes as an accompaniment with devotional songs and dances. In Shyamrai, one *gopini* is playing on flute and the other playing a *swaramandala*. In Madanmohan temple, one *gopini* is playing *mandira* with dancing Krishna and another playing *madala*. In all the terracotta plaques, where we find Krishna and other *gopinis* dancing, they are seen wearing *nupur* or metal ornaments usually worn as anklets.

The temples of Vishnupur a syncretistic image of Harihara Hari Vaishnavism and Hara Shaivism echoing the mute music of the yesteryears and pulsating with the rhythmic movements frozen in baked clay, are no doubt waiting places of gods on their march to the eternal time and space.



## SOCIO-CULTURAL LIFE IN TEMPLE TERRACOTTAS OF WEST BENGAL

Tarapada Santra

The most striking and attractive feature of the late mediaeval temples of Bengal is their terracotta decoration. Contrary to popular belief that terracotta sculptures on the numerous brick temples of Bengal are all of religious content, myriad plaques are also on the walls of temples portraying the contemporary society in its various aspects. The frequent festivities, the ravages of the Portuguese pirates, the exalted life led by landed gentry and the affluent European as also their sports, past time and frivolities, the transport used by all and sundry, the dress of the natives and the Europeans of both sexes, the profuse jewellery worn by indigenous women, cultivation of dance and music, the plain living of the artisan castes and the rural masses - these and many other social themes were carved out of common clay and fired in special kilns for embellishing the temple walls. The enormous stone house of historical and sociological source materials figuring on brick temples of Bengal built between the 16th and 19th centuries, which are still mostly extant, can be regarded a fascinating record of a bygone life during the late

medieval period.

The *tour-de-force* of temple terracotta is, however, the big panels appearing above the entrance arches, depicting mostly, the battle of Lanka, where Rama and Lakshmana fighting alternately with Ravana, various scenes from Krishnalila and puranic legends as also gods and goddesses etc. The base friezes are two, three or even four in number running along the plinth. The lowest of them usually depict the interesting social scenes as mentioned earlier. In this context, it should be mentioned that in my present paper, it is restricted to the discussion only on contemporary social life of the artisan castes and the toiling masses of rural Bengal.

While the terracotta artists left an imprint of various activities of common people on the temple terracotta plaques, it is curious that there is no portrayal of the subject on agricultural ploughing, which is the most important activity of majority population of rural Bengal. But only a single terracotta plaque can be seen on



Damodar temple at Kalyanpur (1786 A.D.) in the district of Howrah portraying a man digging earth by spade.

To immortalise the profession as well as caste occupation of this rural people, the terracotta artists have portrayed an icon of village barber in a sitting pose who is engaged in the work of shaving the beard of a man seated in front of him. This kind of depiction can be seen on the walls of the temple of Chowdhury family (c. 18th cen.) at Kshirpai in the district of Midnapur and also on the said Damodar temple at Kalyanpur in the district of Howrah.

Another depiction of a terracotta plaque showing a blacksmith sitting in front of a burning furnace holding a bellow in left hand, while his right hand is over the fire holding a tong, which is collected from a dilapidated temple (c. 18th cen.) at Ghatal area in Midnapur district, now preserved in a rural museum Ananda Niketan Kirtishala and also on Damodar temple in Kalyanpur (1786 A.D.) in Howrah District.

One of the rural artisans such as Sivli community, nowadays employ themselves by extracting the sap of date-palm trees for preparing molasses. This kind of sap procuring activity is depicted on the Gopinath temple (c. 17th cen.) at Radha-kantapur in Midnapur district, where a man with a pitcher hanging from his waist is bringing down the sap from the top of a date-palm tree.

Another depiction of the life and occupation of common people is a scene of

washing clothes where the washer-woman is pressing the clothes by standing on a basin, while washerman is in the act of pounding the clothes. This plaque is on the temple of Kalyanpur Damodar temple mentioned earlier.

Even in the scene of toiling masses appear a group of people, may be they are milkman, carrying bentpole, with the pitchers full of milk hanging from the pole's two ends, and possibly they are proceeding with their produce towards the market place. This sort of plaque would be seen on Naramadhab Shib temple (c. 19th cen.) in the district of Howrah, Lakshmi-Janardan temple (1871 A.D.) at Ajuria and Damodar temple (1869 A.D.) at Anandapur, both in Midnapur district. The same theme is also projected contiguously with another subject on a plaque from Radha-Gobinda temple (1786 A.D.) at Antpur, in the district of Hooghly, showing a carter driving a bullock cart full of pots.

Even we see the local boatmen with oars propelling local curved river boats and sometimes the sheltering men on the boat smoking hookas appear on the nineteenth century temple plaques of Sitaram temple (1819 A.D.) at Amodepur and a dilapidated temple at Ramchandrapur, both in Midnapur district.

It was a common practice of the terracotta artisans to set up a big size terracotta standing figure of watchman besides the entrance of the temple which is locally called 'Dwarpal' or doorkeeper. Most of statues of doorkeepers are often



holding shield and sword or stick as the case may be. But on Lakshmi-Janardan temple (1846 A.D.) at Illumbazar in Birbhum district we see a finely carved icon of a standing watchful doorkeeper bending his head on a stick to serve as a guard or *paik*, who would be employed by the native Zamindars or rich people.

Nowadays, the fowler as well as hunter community is becoming extinct. But in the past they would hunt animals and birds by indigenous weapons such as bows and arrows. Such portrayal would be visible on the Jor Bangla temple of Kestoray (1655 A.D.) at Vishnupur in the district of Bankura. Another kind of pursuing birds is depicted on Shib temple (1762 A.D.) at Krishnapur in Hooghly district, Shib temple (1861 A.D.) at Surul in Birbhum district, Shib temple (1882 A.D.) at Roypara (Bonpas) in Burdwan district and Shib temple (1816 A.D.) at Pathra in Midnapur district, where a fowler is spearing birds on trees with the help of a bunch of tubular bamboo stick.

Like the hunter community, the life of serpent charmer is also embodied on terracotta plaque, which can be seen on Shridhar temple (1798 A.D.) at Chauly in Midnapur district.

Like-wise another plaque on the temple of Radhagobinda (1781 A.D.) at Chenchuwa-Gobindanagar in Midnapur district depicts a man holding stick in one hand and in other hand holding a cord tied to the bear's neck who is showing various tricks with his pet bear, which is called bear

play among the rural masses. It is a common practice in rural Bengal that a man who is bear player for earning his livelihood entertains the public with his tricks for which he is offered some gratuitous donation by them.

Alongside the above the various scenes of sports and pastime prevailing at that time are also carved on terracotta tiles. One of these, wrestling was in vogue among the rural community and as an example it was depicted on Shridhar temple (1789 A.D.) at Asanda and Damodar temple (c. 18th cen.) at Khalna both in Howrah district ; Brajaraja temple (1892 A.D.) at Kusmuri and Brindaban Chandra temple (1792 A.D.) at Ramkrishnapur both in Midnapur district and also a plaque (c. 18th cen.) preserved in Ananda Niketan Kirtishala.

Acrobats, mostly females, are also found on many temples as column panel or beneath the cornice as brackets, where they often stand on their hands and their feet bent over backwards to touch their heads. The striking acrobat is depicted on Bishnupur temples (17th century) in Bankura district, Raghunath temple (1633 A.D.) at Ghurisa in the Birbhum district, Ramchandra temple (c. 17th cen.) at Guptipara and Visalakshmi temple (c. 19th cen.) at Parul in Hooghly district.

In rural Bengal, once a group of acrobat athletes used to perform their show from village to village for earning their livelihood by receiving gratuitous donation from the spectators. At village level this kind of acrobat show is called '*Bansbaji Khela*' or



play on bamboopole. Sometimes it is also named at 'Chingray Khel' or the play portraying the position of a shrimp. This sort of popular acrobatic performance is on the friezes of Radha-Govinda temple (1786 A.D.) at Antpur in Hooghly district. In this panel the terracotta artist depicts one of the three female acrobats on a bamboo pole kept in triangular form, while the other two athletes are walking with a pitcher on their heads along the slanting pole, and the other associates are showing their physical feat on the ground level amidst the beating of drums by two drummers. The same pattern of terracotta plaque can also be seen on Krishnapur temple (1762 A.D.) in Hooghly district.

Another form of acrobat scene is depicted on Debichak temple (c. 18th cen) in Midnapur district, where a playmate woman is standing over the feet of the two acrobats whose feet are bent over backwards to touch their heads and the drummer is beating drum by their side.

Further more a rare scene of acrobats performing at the top of a pole, with a drummer below is depicted on Radha Binode temple (1697 A.D.) at Cheliama in Purulia district.

As the terracotta artists concentrated on the portrayal of the life of rural artisans and toiling masses, they also manifested side by side the domestic life of the rural Bengalee zenana women. Such portrayals of everyday activities of rural women are not found in large number, yet the study of terracotta icons reminds us of an unknown picture of

domestic life of the womankind during the period under study.

In an agricultural set up, once every peasant family had an arrangement of indigenous husking device made of a long piece of wooden log for transforming paddy into rice, called 'dhenki' which was paddled by the women of the family. The husking device *dhenki* nowadays is an absolute feature, but it can be visible on a plaque of Damodar temple (1786 A. D.) at Kalyanpur in Howrah district portraying three women engaged in husking the paddy by using a wooden *dhenki*.

In the past, silk industry flourished in so many districts of undivided Bengal, for which the terracotta artists had embodied the subject on terracotta plaque, showing a weaver caste woman engaged in spinning thread with a spinning wheel which can be seen on Krishnapur temple (1762 A.D.) in Hooghly district, Shib temple (1769 A.D.) at Utchkarani in Birbhum district.

Another domestic scene is depicted on the wall of the 19th century Vishalakshmi temple at Parul in Hooghly district, where a woman is cutting a fish with the traditional domestic knife called 'banti'. The same theme is also portrayed on Damodar temple (1866 A.D.) at Bhattagram and Brajaraja temple (1892 A.D.) at Kusmuri, both in Midnapur district.

Besides there is a different domestic activity reflected on the plaque of Radha-Damodar temple (c. 19th cen.) at Hadalnarayanpur in Bankura district show-



ing a woman engaged in fishing with a round shaped handnet within a bamboo frame, locally called '*Chhaknijal*'. Here the terracotta artist has particularly culled the theme from the daily life of the Bangalee people which among others, constitute fish and rice.

From the terracotta plates on temple, we find the indigenous practice of child birth as well as the process of delivery of the baby. The method of child delivery has been clearly shown on the plaque where the expectant mother in a kneeling posture leans over a half round bamboo basket, while the baby is being born. As the system of indigenous child birth would prevail among the rural womankind, the terracotta artist engraved the subject in general into the birth of Krishna panel. This sort of terracotta plaque would be seen on many temple among the portrayal of Krishnalila.

Another interesting matter, which is depicted on terracotta plaque, is the habitual practice of urinating among the womanfolk in rural areas. One such plaque (c. 18th cen.) collected from Ghatal in Midnapur district is now preserved in the Ananda Niketan Kirtishala museum shows a woman in a standing posture discharging her urine by leaning her body forward and she has caught a *vringar* (a jug with a spout) in her hand for washing purpose.

Again, there is practice of householder prevailing in rural Bengal that the women of the family will have to perform the housework early in the morning by sweeping the courtyard of their dwelling house

with broom and also by sprinkling water mixed with cow-dung, which is commonly known as '*Basipat*' or routine duty to clean up since morning. There are two terracotta plaques placed side by side portraying this theme on the temple of Joydeb-Kenduli (c. 18th cen.) in Birbhum district. Here on the left side of the plaque is depicted a woman standing with a small earthen pot in her hand, probably busy to sprinkle the cow-dung water, while the other plaque shows another woman standing by the side of a half-open door with a broom in her hand.

Another domestic work of rural women in those days was to procure drinking water from tank or river as the case may be, for which the terracotta artists portrayed woman with a pitcher in her waist, whose instances are on Brindabanchandra temple (1794 A.D.) at Ghatal, Raghunath temple (1893 A.D.) at Anandapur, both in Midnapur district and also Damodar temple (c. 19th cen.) at Khalna in Howrah district.

Another popular theme reflected on temple plaques, where women with their children on their laps or holding in their arms can be visible on so many temples. Of them the finest terracotta carvings on the subject would be seen on Baneswar Shib temple (1819 A.D.) at Makalpota and the temple of Pan family (c. 19th cen.) at Yakubpur, both in Midnapur district and also Radhagobinda temple (1773 A.D.) at Antpur in Hooghly district, showing a mother holding the arms of her child in different postures, which indicates the



parental affection.

In early days there was a notion that mostly women are illiterate. But our terracotta artist gives out an impression by carving on a plaque that the ladies of zenana can read poetic verses written on *puthi* or ancient manuscript. A plate on Shankar Shib temple (1836 A.D.) at Shribati in Burdwan district depicts a sitting woman reading a manuscript copy. Otherwise on Damodar temple (1869 A.D.) at Anandapur in Midnapur district, a plaque indicates the theme on the duty of a mother to educate her children, where under the guidance of a mother the children are seated with folded legs holding the manuscript copy in their hands.

Many types of attendant women appear on the terracotta plates inserted into temple walls. A plaque on Lakshmi-Janardan temple (c. 18th cen.) at Surul in Birbhum district depicts a woman with a handfan. In Radhaballav temple (c. 19th cen.) at Khanjapur in Midnapur district, there is a plaque showing a female attendant with a brush in her hand for fanning. Another plaque on Pratapeswar Shib temple (1849 A.D.) depicts such women attendants in a row with their own equipments for household duties. These are examples of different women attendants engraved on terracotta tiles to carry out orders in the aristocrat families.

Another interesting topic has been carved on terracotta plaque where a woman is depicted in standing posture peering out of half opened shuttered doors

awaiting, as it were, her lover or husband. This sort of plaque can be seen on so many temples. In this connection, Radhagobinda temple (1786 A.D.) at Antpur in Hooghly district, Ramchandra temple (1843 A.D.) at Chirulia and Janaki-Ballav temple (1810 A.D.) at Tilantapara, both in Midnapur district are worth mentioning.

Sometimes women are seated at the balcony, of which a fine terracotta sculpture can be seen on Pratapeswar temple (1849 A.D.) at Kalna in Burdwan district.

Intimate domestic scenes like ladies doing their hair or putting vermilion on the foreheads and playing indoor games or busy with household chores also appeared on the terracotta plaques. In rural Bengal it is a prevalent practice that ladies after bathing usually take care of their tuft of hair, squeezing out the water by twisting hair with their fists and secondly, by shaking hair with a napkin by moving it backwards. The first kind of hair dressing pose is carved on the Jugalkishore temple (c. 19th cen.) at Rajhati, Jagannath temple (1719 A.D.) at Badar-Gopinathpur, Radha-Damodar temple (1817 A.D.) at Kshirpai, Shib temple (c. 19th cen.) at Lakshmipur, Shridhar temple (1856 A.D.) at Lochipur and Shib temple (c. 19th cen.) at Jasora, all in the district of Midnapur. The second kind of hair dressing scene can be seen on the temple plaque at Suhari Shib temple (c. 18th cen.) in Burdwan district.

Another kind of hair dressing is depicted on the plaques of Lakshmi-Janardan temple (c. 18th cen.) at Surul in



Birbhum district, Brindaban temple (1792 A.D.) at Ramkrishnapur in Midnapur district, Shib temple (1762 A.D.) at Krishnapur and Radha-Gobinda temple (1786 A.D.) at Antpur, both in Hooghly district, where a seated lady looks with a mirror in her hand, while another, possibly boon companion or may be an attendant dressing her coiffure with a comb.

Besides, the plaque on Ananda Vairabi temple (1813 A.D.) at Sukharia in Hooghly district, Lakshmi-Janardan temple (c. 18th cen.) at Surul and Joydev-Kenduli temple (c. 18th cen.), both in Birbhum district reflect the essential custom with married Hindu ladies putting vermilion spot on her forehead while sitting with a mirror. Again on Radhagobinda temple at Chenchuwa-Gobindanagar (1781 A.D.) and Lakshmi Baraha temple (1867 A.D.) at Karkai, both in Midnapur district, we see on the plaques two women in a sitting posture facing one another, one of whom is putting vermilion on other's forehead.

Mostly the terracotta portrayal of Bangalee marriage ceremony is centred to puranic gods and goddesses. But on the temple plaque of Ramjibanban (c. 19th cen.) in Midnapur district a view of marriage ceremony has been excellently engraved, where the bridegroom with '*topar*' on his head and the bride embellished with ornaments wears a *sinthi-mour* on her head and keep their hands lying over a *mangal-ghat* (auspicious pitcher).

There is another plaque on the Lakshmi-Janardan temple (1846 A.D.) at

Illumbazar in Birbhum district where it is depicted a newly married couple riding on a *duli*, a kind of palanquin, borne by four bearers and mostly the brides pet dog, beneath the *duli* are on the eve of a journey towards bridegroom's house.

Multifarious activities of well-to-do aristocrat women during their leisure time are also engraved on terracotta tiles. They are depicted as playing dice on Radha Gobinda temple (1786 A. D.) at Antpur in Hooghly district. A plaque on Uchkaran temple (1768 A.D.) in Birbhum district shows two women playing with miniature conch or *cowrie*.

Sometimes women engaged themselves in leisure time entertainment with the nursing of their pet birds or animals etc. This is on Lakshmi-Janardan temple (1840-A.D.) at Devipur in Burdwan district, Radhagobinda temple (1891 A.D.) at Purba Gopalpur and Shib temple (c. 19th cen.) at Lakshmipur, both in Midnapur district, there is the depiction of a female figure with a peacock in her lap. Another depiction of a woman shows she stands beneath a tree that she holds with one hand, plucking the foliage with the other and a deer is at her feet. This kind of motif on terracotta plaque can be seen on Radha-Damodar temple (1806 A.D.) at Hadalnarayanpur in Bankura district, and also on other temples viz. Raghabeswar temple (1669 A.D.) at Dignagar in Nadia district, Sitaram temple (1733 A.D.) at Kankrakhuli in Hooghly district, Shib temple (c. 19th cen.) at Lakshmipur in



Midnapur district and Buro-Shib temple (1726 A.D.) at Majuketra in Howrah district.

Again erotic panels occur throughout temple art, whose number has never been large but have different characters. Some times the act of bestiality scenes occur, whose instance is on a plaque on Banka Roy temple (1801 A.D.) at Laoda in Midnapur district. In this connection, I would like to mention that in those days prostitutes, now they are known as sex workers, were not regarded as contemptible, but their profession was considered as a dignified service to the society. Here is a depiction of a plaque on the temple of Damodar (1786 A.D.) at Kalyanpur in Howrah district which shows that the prostitutes were meant to satisfy sexual desires of human beings one and all. That is why in this plaque we see a man with an erected penis is waiting, most probably for the next turn of copulation.

Like the prostitutes, *baijis* or professional dancers and singers have important role in the social life of the upper class who devote themselves to the pleasure and amusement of the public. A remarkable plaque on Radha Gobinda temple (1786 A.D.) at Antpur in Hooghly district depicts a scene where three *baijis* are performing dance with the instrumentalists in presence of an aristocrat. Here is another plaque on the same temple showing a baiji singing before an European Sahib seated on a chair while the enterprising landlord who is otherwise a 'Babu' is in a standing position amidst the other instrumentalists.

There is ample evidence in a number of terracotta plaques, of the activity of the *baijis* who are carved on in performing dance and songs, not only in the house of the patron, but often on pleasure boats and even carriages etc. The noteworthy plaque performing in an open carriage can be seen on Ananta Basudev temple (1745 A.D.) at Kalna and such pleasure trip with *baijis* on boats have been portrayed on the temple plaque of Shib temple (1792 A.D.) at Amadpur both in Burdwan district.

The most striking feature on the temple wall is the life and culture of Yogis, most of them are Saivaite yogis who are locally called 'Mohanta'. Being associated with any Saiva monastery, they passed the daily life with various religious meditation. The yogis appear on terracotta plaque to have disarticulated limbs as they twist their legs and arms about impassive moustachioed faces. Sometimes they are shown as having long matted lock and bearded worshipping a Siva linga or blowing conch or playing on drums and stringed musical instruments. A fantastic stringed musical instrument played by a yogi in a sitting posture is shown on a terracotta plaque (c. 18th cen.) collected from P.S. Debra in Midnapur district (now preserved at Museum and Research Centre, Maligram, Midnapur) where the yogi gripping a tongs like instrument with a string in his raised left hand placed before his lips while his right hand is in a state of being played on that instrument. Now and then they lean on sticks or stand on one leg and often they are seen smoking hookas or pounding their hemp.



Another terracotta plaque (c. 18th cen.) collected by Ananda Niketan Kirtishala museum depicts two yogis holding the ends of a piece of cloth over a pot, possibly straining powdered rice for preparing indigenous cakes.

But among the plaques of life style of the yogis stated above, there is an amazing plaque which reminds us the private livelihood of the ascetics as they practised in their monastries. One of such terracotta plaques on Shridharnath temple (1789 A.D.) at Asanda in Howrah district, where a seated ascetic appears to have engaged in act of shaving with a razor the superfluous pubic hair of a naked ascetic standing before him holding a mace or may be a brush for fanning made of the hair of a yak's tail on his shoulder, who seems to be the head of the monastery, and also another fellow ascetic standing behind is combing the hair of the seated ascetic. So these are the examples of source material on social history regarding the behavior of the Saiva yogis prevailing at that time as carved out by the then terracotta artists.

Above all, the terracotta sculptors did not fail to portray some sarcastic themes regarded as social evil in those days. The plaque on Sridhar temple at Palaspai (1834 A.D.) in Midnapur district depicts a man who is falling at the feet of a woman. This plaque assails the effeminate males of the society enslaved to their wives. In fact, this type of satirical subject-matter was also dealt with in the contemporary Kalighat Paintings or printed woodcut pictures. Like

the theme under discussion, Kalighat painters also draw other sketches of Bengali social life with a henpecked man carrying his spouse on his shoulder while his old mother walking supporting on a stick and a rope tied to her neck being pulled by his wife who was being carried upon his husband's shoulder. In a like manner the terracotta artists also depict this prototype scene on the temples of Kshirpai (c. 18th cen.) and Khetrahat Taraknath Shib temple (1879 A.D.) both in Midnapur district to expose the harmful effect of modernism as youthful wife is preferable to his mother.

At the last, in Bengal one important festival is the *gajan* festival connected with the cult of Shiva and on that pretext *Charak* is celebrated where a devotee called *sannyasi* is hanged by an iron hook piercing on his back which has been tied to the end of a rotating pole fixed on a wooden log. This common practice of *Charak* ceremony as depicted on Gopinath temple (c. 18th cen.) at Radhakantapur in Midnapur district.

As Durga Puja is another festive occasion of the Bangalees, the indigenous drummers called *Dhaki* are employed for beating drums. A terracotta plaque on Lakshmi-Janardan temple (1846 A.D.) at Illumbazar in Birbhum district shows that a drummer is beating drum while his little companion is percussing the bell metal dish at the right moment beneath an idol of Durga with her children.



Before concluding my discourse, let us see who prepared these terracotta plaques and how ? The concerned artisan were generally known by the appellation of *Sutradharas* who worked in other media also like stone, wood and paint. Be that as it may, temple inscription as well as up-to-date field information reveals that the surnames of the sutradharas were - Pal, Sil, Chandra, Datta, Kundu, De, Maity, Pandit, Ram, Kar, Karmi and Sen etc., and that they used to work in peripatitic guilds from their principal centres at Chetua-Daspur, Chandrakona and Rajhati area in Midnapur district, Thalia-Raspur, Rautara, Binola-Krishnababi in Howrah district, Khanakul-Krishnanagore, Senhat, Moyal, Antpur and Bakhati in Hooghly district, Vishnupur, Sonamukhi and Balsi in Bankura district, Guskara, Ketugram and Bonpas in Burdwan district and Saonta, Suri and Dubarajpur in Birbhum district. Those interested in having more information on this subject may kindly refer to the article entitled 'Architects and Builders' in

the anthology of 'Brick Temples of Bengal from the Archives of David McCutcheon' published by Princeton University Press, and also the article entitled 'Late Mediaeval temples of West Bengal ; an account of their architects and builders' published in the journal 'Bangladesh Lalit Kala' No. 2 edited by Enamul Haque, both the articles are written by me.

Again the actual fabrication of the individual plaques was done, mostly by sculpting the soft-clay models with iron or bamboo chisels and, occasionally, by casting them in moulds when similar pieces were required in large numbers. The kilning was done in the traditional manner using wood as fuel, but it appears that a slow fire was preferred.

To those unknown skilled artisans (who, alas, are no more), Bengal owes a deep debt of gratitude for their superb artistry with common clay unmatched in India during the mediaeval and late mediaeval periods.



## ORNAMENTS IN THE TERRACOTTA FIGURINES IN EARLY BENGAL

Mangala Chakrabarti

Love for ornaments and jewelleries to adorn oneself is the universal inherent quality of human being from time immemorial. Indian sculptural art whether it is in stone or in terracotta or in wood or in metal witnessed the predilection for ornaments and jewellery from the early historic periods. Indian artists prefer to adorn the figurines with various types of ornaments. Every exposed part of the body of sculptured figures has its own ornaments.

A large number of terracotta figurines and plaques acquired from different sites of Bengal by way of explorations and excavations witnessed the preponderance of the jewelleries used by the then people of India. My study is mainly based on these terracotta figurines and plaques wearing various types of ornaments and a few ornaments of clay and metals, though their numbers are very limited.

Among the traditional ornaments of ancient and medieval India, we should note the different types of head-dresses, viz. *kiriṭa mukuṭa*, *karaṇḍa mukuṭa*, *śīrastraka*

for the head, for the neck they used to wear necklace or *hāra*. The commonest among the necklaces is a type of heavy necklace called *phalaka-hāra*, which further subdivided into *dvi-phalaka*, *tri-phalaka* and *pañcha pholaka*<sup>1</sup>. Simple single stringed necklaces called *ekābalis* are also seen. Besides these, there are *aṣṭamāṅgalika hāra* having the pendants of eight auspicious symbols<sup>2</sup>.

In case of hand-ornaments we have to mention *keyura*, *kaṅkana* and *balaya*. *Keyura* is a flat ornament worn on the upper arm just above the biceps muscle. The *kaṅkana* and *balaya* i.e., bracelets are worn at the wrist. *Udara-bandha* is a broad belt worn at the junction of thorax and the abdomen. The belt going round the hip is called *kaṭibandha*. In case of ears various types of ear-ornaments are found worn by the men and women. These are *patra-kunḍala*, *makara kunḍala*, *śaṅkha-kunḍala*, *sarpa-kunḍala* etc.

Another type of ornament which is often seen worn by the female figures is *chhannavīra*. J. N. Banerjee<sup>3</sup> describes it as made of two chain-like objects worn cross-



wise on the torso, one in the *upavīti* and the other in the *prāchīnāvīti* fashion (the latter, is just the reverse of *upavīti*) with a flat disc placed on their junction near the centre of the chest.

Other ornaments which are often seen worn by the female hood to hold the lower garment in position are *mekhalā* or girdle and *kañchidāma*.

A more conventional type of ornament mostly worn by the female consists of a pair of anklets. Both round and elliptical types are found.

These are some of the ornaments referred in various iconographic and Sanskrit texts. The earliest representation of such ornaments is, to be found on the prototype of Śiva-Paśupati at Mohenjodaro.

Ornaments are generally made of different kinds of mediums such as gold, silver, brass and pearl. These jewellerys are often studded with precious or semi-precious stones. Various types of beads of precious and semi-precious stones and beads of baked clay obtained in course of excavations and explorations also convey that these were used as ornaments by the men of different economic status.

Early terracotta figurines of Bengal having come from the sites like Chandraketurgarh, Mahasthan, Tamluk, Bangarh, Panna, Harinarayanpur, Mangalkot etc. represent a rich variety of ornaments which point out the love for the jewellery of the people of Bengal and at the same time reflect the skill in craftsmanship of the

goldsmith of the period concerned.

We have very little evidence of ornaments from the prehistoric Bengal. The extant examples do not give the idea about the nature of ornament. The fragmentary mother goddess unearthed from Pandu Rajar Dhibi, Mangalkot (Period I) wearing a girdle shown by pin-holes as well in applique are the sole example of the kind (pl I)<sup>4</sup>.

The Maurya terracotta figurines found from the sites like Chandraketurgarh, Tamluk, Pokharna, Atghara are very few in number. A well-dressed bust of a lady hailing from Tamluk displays a typical Maurya head-dress with a big disc-like ornament (fig. 1). Another similar head found from Chandraketurgarh reveals instead of one, two disc-like ornaments decorating the head-dress (fig. 2). The ear-ornaments shown in this period are simple ear-studs and ear rings. Two types of neck-ornaments are seen. One of them is a close-fitted collar (still known as *hānsuā* of *hānsuli* in Bihar and U.P.) and the other is a short necklace consisting of two rows of metallic square plaques (figs. 1 & 2). A torso of a female figurine also from Chandraketurgarh represents a girdle of simple band in applique (fig. 3).

The succeeding phase of the Sunga-Kushāṇas represents great dimension in terracotta art in Bengal and also rich in content of terracotta figurines. They are heavily loaded with ornaments and jewellerys. Regarding the head-dress, the period shows a few distinct types of ornaments. The best example of this period is



the figure of a Yakshi, preserved in Ashmolean Museum, Oxford (pl. 1b). She has an elaborate head-dress decked with different types of ornaments. Her right side coiffure is highly decorated with five hair pins topped by sword, spear, battle-axe, trident and *aṅkuśa* and held by a band of four rectangular decorated plaques, while the coiffure to left side is adorned by a pearl band of several beaded strings. Sometimes these hair pins increase in number from five to ten or more. Figurines with similar hair pins have been noticed in the mid-upper Gangetic valley. The figurines of Yakshi sometimes wear a jewelled crown. On the forehead we find a closely fitted four rows of beads terminated at each side with a flower tassel probably of lotus, as evident from a Bharhut Yakshi<sup>5</sup>. An interesting ornamental crown decorated with jems-studded bands is worn by a figure of Kubera from Chandraketugarh (fig. 5) that reminds us an early form of *kirīṭa-mukuta* worn by Viṣṇu, Surya and Kubera<sup>6</sup>. A unique type of forehead ornament is noticed on a female head of Chandraketugarh (pl. I,c). It is a round jem-studded pendant with several radiating bead-strings popularly known as *ṭikli* which is still a popular and fascinating ornament among the women folk of Bengal and Bihar.

Ear ornaments are seen worn by both the male and female figurines in Bengal. The commonest types are out-sized ear-rings and ear-studs from which hang several beaded strings. This ear-stud commonly known as *kān-pāsā* in Bengal, decorated with intricate designs and often stud-

ded with precious stones (pl. Ib,d). A figure of Kubera hailing from Chandraketugarh is noticed wearing large ear-rings with several tassels (fig. 5). Besides, there are ear-discs, either of plain or voluted designs. Sometimes two types are worn at a time one on each ear.

Neck ornaments are also of varied types and designs worn both by the men and women of the period under study. But a few types are noticed that exclusively adorn the necks of the female figurines. A figure of Yakshi from Tamluk depicts a unique type of close fitted collar of wire having the pattern of undulating creeper (fig. 6). A necklace of two strings of pearls with a star shaped pendant is of worth mentioning i.e., *phalaka hāra*. An exquisite specimen of necklace reveals five pearl chains with a large jewel i.e. *pañchalāhari hāra* (fig. 8) coming from Chandraketugarh. Another head also from the same site shows delicately designed necklace with several suspended tassels (pl. IIa). Beside these, the most common type is the broad heavy torque (*hānsuli*) having the floral motifs studded with precious stones (pl I,d). Along with this, mention may be made of the long necklaces which are often seen going up to the drapery in a beautiful fashion (fig. 6, pl. II b).

In Bengal of the Śunga-Kushāṇa age hand-ornaments were of various types. Generally bracelets or *balayas* are heavy and broad with the execution of complicated floral motifs and designs. The figurines are seen usually wearing two to four sets of bracelets at a time. The so-called Oxford



figurine reveals four types of such bracelets – the lower one consists of pearl strings, while other three are of heavy metallic pieces with embossed floral motifs (pl. Ib). The representation of armlet *i.e.*, *keyura* is rare in Bengal. But a few figurines witnessed so far, points out the prevailing practice of wearing armlets. A figure of Yakshi hailing from Chandraketugarh wears a coiled type of armlet in her right hand. Another unique type of this ornament is found in a mutilated terracotta female figurine showing flower motifs in relief in the middle with rows of beads along the both sides.

Girdles are usually found worn by the women folk and not by men as in Kushāna period. There are varieties in the pattern of girdles during the period under review. They are composed of one, two, three or even four strands. The Oxford Yakshi is adorned with a girdle consisting of three strands around her hip, the upper and lower one are made of beads while the middle one is of small circular stamps (pl. I,b)

The fashion of wearing anklets was also in vogue in Bengal. The figures of Kubera from Chandraketugarh and a Yakshi from Tamluk wear round plain anklets (fig. 6). Another type is found made of clusters of small jingling round bells which are still traditionally worn during dance performance.

The animal figurines of the period (fig. 7) are also decorated with various types of beaded ornaments revealing contemporary prosperity and practice. Terracotta figu-

rines with excessive ornaments of the Śunga-Kushāna period may, to some extent, conceal the beauty of the delicately modelled body, but when we consider it in terms of types, style and personal charm, the nicely decked figures with necklace, bracelets and heavy anklets in the feet mark the milestone of prosperity of contemporary society of Bengal.

During the Gupta period the terracotta figurines found in Bengal are not very numerous in number compared to preceeding periods. Following the classical idioms of contemporary art of the age they represent a refined plastic quality and ornaments which are depicted in it are also refined and modest. The lower part of the lady of the early Gupta age (pl. II,c) found from Tamluk shows a beaded bangle in her extant right hand and a girdle consisting of a single strand of small round discs, the pattern may be the continuation of the earlier period of the Śunga-Kushāna tradition that we have noticed in the girdle of the famous Oxford Yakshi. She has an anklet of similar type of beaded strings. Another fragmentary figure of mother and child that hailed from the above mentioned site represents a necklace running through her breasts in an elegant fashion. Both men and women of the age wear necklace as witnessed from the famous mithuna plaque of Mahasthan (pl. II,d). The common type is the chain of twisted rope pattern. Other universal type as found here is a single stringed pearl necklace having large sapphire in the centre (*indranilairmuktāmayi yaṣṭi*)<sup>7</sup>.



In accordance to the plastic form, the ornaments of the Gupta period are highly sophisticated and elegant in nature and do not disturb the plastic form of the body in any way rather these enhance the physical charm, beauty and dignity of the beautifully carved or moulded forms. In contrast to earlier periods the Gupta terracotta figures

are more refined and elegant and free from extra load of jewelleries and ornaments.

Here like their stone counterparts, more emphasis has been laid on the human form that played pivotal role in the period concerned.

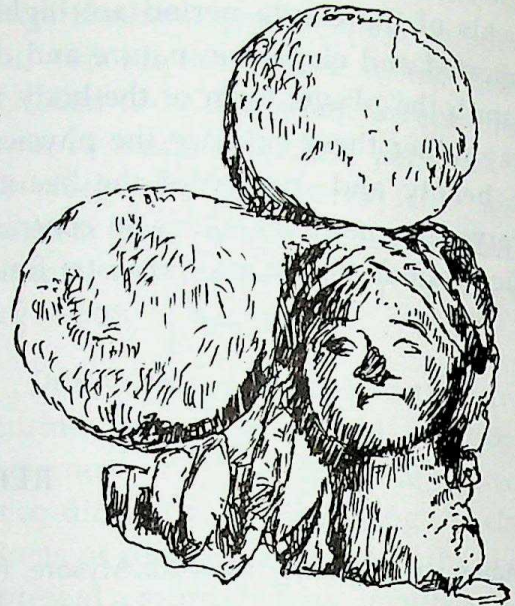
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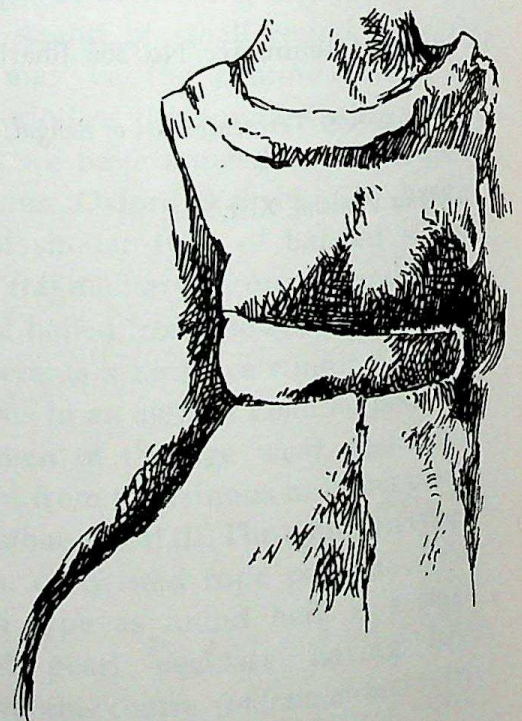
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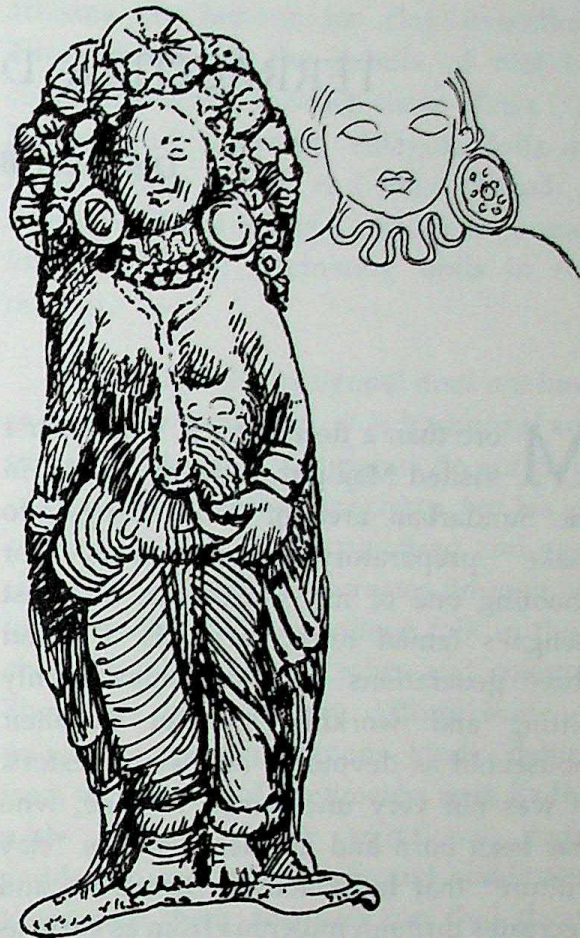


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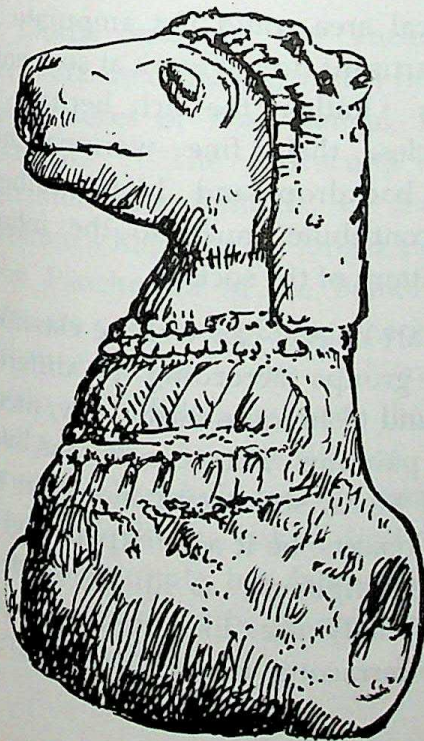




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## TERRACOTTA DOLLS OF BENGAL

Debasish Bandyopadhyay

More than a decade back, when I first visited Majilpur, a sleepy hamlet in the Sundarban area of South Bengal, to make preparatory arrangements for shooting one of my short films on West Bengal's famed terracotta dolls, I found three generations of a craftsman family sitting and working together in their household as devotedly as their ancestors. It was not very uncommon for one, who has been born and nourished in the "clay culture" that India actively preserves and recreates through millennia from as early as the Indus Valley Civilization, to discover such a practising artisan family in an obscure rural setting. It was neither joy nor wonder for me to get in touch with them in a tumbled down hutment amidst olden structures mostly derelict, eaten by time and worn out by the elements. Rather, I once again felt the pulse of an amorphous, yet strongly assertive, Indian zest for life, an Asian code of expression in essence in its true perspective. Octogenarian Manmathanath Das, his nephew Panchugopal and Panchu's little son Sambhu of Majilpur, have all stuck to the traditional

task of doll-making, warding off the allures of decadent and superficial trends. Manmathanath is no more. But against tremendous odds members of his family still enjoy making dolls, spontaneously utilising the present to recreate the past for the sake of the future.

Artifacts and handicrafts have thus found such a place in the socio-cultural life of India that even the advent of the modern technological area could not amputate its root. The artisans do not work at souvenirs and curios. Rather, the rich heritage of their articles, their fine workmanship, ritualistic backdrop and high aesthetic qualities contribute much to the inbuilt cultural pattern of the society.

These art objects can well be classified into four groups according to different materials and techniques used—clay, metal, wood and painting. But a continuous overlapping of ideas, styles and motifs in the making of objects, be it a *pata* (painting) or a terracotta figurine, is quite evident. Articles of daily use, like metal utensils, tools and terracotta pots and bowls are



produced in bulk. They are, by and large, of the same standard with their origin dating back to the dawn of civilization when man first encountered his rudimentary needs. Even these utilitarian objects are also made with same passion, precision and intrinsic artistic zeal which are the main characteristics of folk art objects of perennial aesthetic value.

The distinct mark of the creative mind of the village artisan is unmistakably found in everything he makes. A stringer's scrutiny would further reveal that our villages no longer can be written off as breeding places both for political and economic exploitation, but till now they have some beautiful things to offer to global intellectual activities in the forms of dolls, toys or icons, which by their inherently organic structure and vitality can provide a culture of choice with collective and individual access for a free becoming.

Oddly enough, the ancient art of terracotta doll making, which flourished in many places of West Bengal, has almost perished. The terracotta dolls of Murshidabad's Kantalia, or the dolls of Birbhum's Rajnagar no longer exist. Apart from Panchmura in the Bankura district, there are only two places where this art is still in evidence – one in Narajol in the district of Midnapur and the other in Majilpur in the district of South 24 Parganas. The dolls are first cast, then sun-dried and finally baked in the furnace. After this simple but labourious process, dolls are ready to be painted and finished in the workshop.

There are other ways to make dolls. At Krishnanagar, in the district of Nadia, artisans are famous for clay modelling. They imitate all the details of real life characters while making those dolls. At Narajol and adjoining villages, dolls are handcrafted, dried and then baked in ovens. Village patuas and their women folk also make fascinating dolls in this manner.

At Majilpur Panchugopal does not have an elaborate workshop. It is traditional and simple. The brushes and paints do not carry an expensive tag, they are cheap, but his art certainly is not. By his practised and easy skill and ingenuity he recreates through his innumerable dolls the village folk in their characteristic postures, robes and colours. There are others—a shy, village bride, a policeman, pets of various kinds, deities from the legends of the timeless past, Radha with Krishna, other traditional gods, goddesses and lesser gods and goddesses. You name them and you can find them. The doll named 'Portuguese girl' with its foreign robes and attires show an influence of European porcelain art also.

The local gods and goddesses have not been left out either. In the Sunderbans, the swampy forests of the south, there are so many of them. Ban Bibi—the lady of the forest, Basanta Ray, Gazi Saheb, Manasa, etc. If you want to enter a deep, tiger infested forest all you have to do is to pay obeisance to Ban Bibi and not a single tiger will dare touch you. Manasa Devi is the goddess of serpents. There is a belief that



these local deities protect them in one way or the other.

The doll making art is full of life. The dolls have taken their place in the museums with pride. But the artisans like Panchugopal are hard put to make both ends meet. People appreciate their art, but when it comes to paying a proper price, they shy

away. It is painful, but perhaps it passes away quickly for they go on making dolls as earnestly as ever. Through endurance they themselves have learnt and taught others how to fight and win over a real struggle for artistic existence. This is the lesson of history and one cannot ignore it either.



# BENGAL TERRACOTTAS IN THE INDIAN MUSEUM

Shyamalkanti Chakravarti

*It has long been felt a desideratum to bring out a series of handlists of the rich antiquities deposited in the Indian Museum which would help scholars and researchers for further elaborate study on the subject. The similar handlists of sculptures and paintings in the collection of the Indian Museum were published in the recent past. The present catalogue of about five hundred terracotta objects from Bengal contain the brief description and museological data pertaining to the specimens on display and in reserve. The list is not exhaustive and there is every scope of improvement of the contents and the information about the exhibits. The list has been prepared by the staff of the Archaeology Section of the Indian Museum.*

## Introduction

If stone is considered to be the bony mass, clay may represent the flesh of the mother-earth. It is interesting to note that from time immemorial man has used these two materials ceaselessly over the ages to create, in an effortless manner, a sublime art which manifested itself in thousands and millions of beautiful sculptures and architectural wonders. A sculpture fashioned in clay and burnt subsequently is called terracotta which in Latin language means 'earth with a hard coating'. (terra is equivalent to earth or clay, and cotta means dry coating or the upper garment of a man). Technically terracotta refers to baked clay objects which are different from unfired

clay images. The clay used for terracottas in Bengal generally comes from river-beds or alluvial deposits of the Gangetic plain.

The fashioning of a terracotta figure undergoes different stages of its preparation, namely, the making of the raw materials, forming process, firing-technology and surface-decoration. Varieties of clay are mixed in different proportions to achieve different results depending on the purpose for which the terracotta is intended.

The land which has the 'Ganges at its heart' has received an uninterrupted and steady flow of alluvial high plastic materials through the ages for the fashioning of its sculptural wealth in unbaked clay and terracotta forms. The people of this land



Vanga, as mentioned in ancient literary texts in India from the days of the Aitareya Aranyaka became identified with the name of the country itself. The Greek and Chinese sources mention this area as a country which stretched a long way along the coast now in West Bengal and Bangladesh. Till the second century A.D., Vanga denoted this territory. To the west of the Bhagirathi river the land was known as Radha to which the term Sumha was related. With the extension of the territorial limit of Vanga in the pre-Gupta period, a part or whole of Radha was gradually incorporated into its domain. In the post-Gupta and in the following ages the two names, namely, Radha and Gauda became more popular and the coastal territory to the south of Vanga was termed Vangala which subsequently during the medieval age came to be known as Bangalah and Bangala derived from Vangala. The name Bengal became popular in the late medieval and modern times although in British India it was generally known as Vanga.

The prominent art centres of terracotta workmanship in ancient and medieval Bengal flourished on the banks of rivers simply because of the fact that soft clay was available here in abundance. Its easy pliability for attaining the desired degree of delicacy in moulding, allowed the artist to give consummate shape to his craftsmanship. Bangarh on the eastern bank of the river Punarbhaba, Farakka on the right bank of the Ganges, Karnasuvarna on the left bank of the Bhagirathi, Mangalkot stretching along with the river Ajay,

Pokharna and Mahanad in the Damodar river valley, Panna on the river valley of Silavati, Tamluk on the right bank of the river Rupnarayan, Tilda flanked by an ancient coast of the river Kansai, Chandraketurgh in the vicinity of dried up course of the river Vidyadhari, Atghara close to the bed of Adiganga and Harinarayanpur situated near the estuary of the Ganges—all formed the important centres of terracotta art of West Bengal. In a word, the sites in West Bengal extending from north to the south covered the districts of Dinajpur, Malda, Murshidabad, Burdwan, Bankura, Hooghly, Midnapore, 24 Parganas both north and south. Of the three formidable terracotta-yielding historical sites in Bangladesh two are located in Bogura and Rajshahi districts in its northern part and the other one is located in the Comilla district in the south-eastern part of the country lying in close proximity with Myanmar. Equally significant were the flourishing centres of terracotta art in Bangladesh. Mahasthangarh on the west bank of the river Karatoya and Paharpur on the eastern bank of the Yamuna, both located in ancient Pundravardhanabhukti; Mainamati on the south western bank of Gumti river an important place of ancient Samatata situated in and around Mainamati-Lalmai hill range also emerged as the prolific centres of the art of the baked clay in Bangladesh. The terracotta art of Bengal can be broadly classified into figures of divinities and semi divine beings, narrative panels, toys, animal figurines, decorative and erotic or *mithuna* motifs as well as seals and sealings.



Of all the major historical sites yielding in large number the object of burnt clay, Chandraketugarh, Mahanad, Tamluk and Bangarh and Mahasthan represented early phases of terracotta art activities. Paharpur and Mainamati betrayed primarily monastic terracotta embellishments in their highly developed and stylistic art idioms of early medieval ages. Temples at Ghatal, Daspur, Nabagram in Midnapore; at Kalna and Sat-Deul temple in Burdwan; at Baram Deul in Purulia; at Suri, Hetampur and Jaydev-Kenduli, Ganpur in Birbhum; Birnagar in Nadia, at Bindal in Dinajpur and Jatar Deul and Bawali temple in 24 Parganas are famous for their narrative panels of great socio-economic importance of the time. All these artistic activities in terracotta revealed a sustained continuity of this popular art-form through the ages.

At Chandraketugarh excavations and explorations over the years, beginning from 1955-56, have brought to light a large number of terracottas highlighting various aspects of iconographic characteristics in the configuration of gods and goddesses, semi-divine beings, figures of animals, toys and carts, inscribed potteries and seals in Kharoshti-Brahmi character. This ancient port town along with an equally important and celebrated navigational centre-Tamralipta yielded outstanding specimens of fired-clay art spanning over different historical phases of Maurya, Shunga, Kushana and Gupta periods.

Of the antiquities discovered at Paharpur, the largest number, however,

consisted of terracotta plaques numbering about two thousand found *in situ* and about eight hundred picked up loose. Varying in artistic merit these panels depict divine figures, both Brahmanical and Buddhist, on continuous friezes of terracotta plaque of exceptionally rich and varied themes. The terracottas unearthed here belonged to a period ranging from the late Gupta to Pala times.

The terracotta plaques recovered from Mainamati reveal a panoramic view of dynamic movement, expression of popular fancy and folk imagination which is somehow different from the hieratic art of the Pala-Sena age. The theme of the panels are drawn from the daily life of the people and their activity, emotion, movement and rest. Divine and semi-divine figures, composite animals, celestial musicians, men and women in various movements, warriors, archers, acrobats, sages and ascetics are represented here with all their local and ethnical characteristics.

The late medieval brick temples of Bengal inspired by the feudal impulse of the time contain the realistic depiction of divergent themes consistent with the emerging socio-economic needs of the semi-urban society. The enlivening depiction encompasses the multichrome aspects of earthly pleasures of life, of fascinating areas relating to day to day necessities of the common people. The portrayal also narrates in vivifying yet simple artistic idiom, the traditional religious anecdotes so common to the Indian temple art.



The Indian Museum collections of terracotta art objects, ornamental bricks and decorative panels, inscribed seals etc. approximately of five hundred examples provide a sum total of socio-cultural milieu of Bengal from the ancient to the modern ages. The medallion from Mahasthangarh of a couple or *dampati* emerging from a full-blown lotus in gracefully swaying pose demonstrating the legacy of the Gupta-tradition, but fabricated in the Pala period, is one of the excellent pieces in terracotta. The Paharpur plaque of a pole-bearing mendicant in movement as interpreted by the scholars perhaps requires a different explanation. The emaciated and bearded man stooping for a run with his right hand holding a country dao seems to be an extractor of date-juice, commonly found in the villages of Bengal even today.

The cymbal player or an archer, the woman churning milk, the playful drummer, a female dragging out a child from a well, the dancing lady, the peacock feeding the younger one, the *shavara* couple, the plantain tree with spreading leaves, images of Buddhist and Brahmanical deities, like Manjusri, Tara, Karttikeya, fish emitting pearls, snake-headed god playing on musical instruments, monkey couple etc. from Paharpur all attest to the tantalising and colourful aspects of human life, animal world, nature and godly representations. Similar subjects like humped bull, peacock emitting pearls, elephant, lion, boar, goose, combat between man and lion, man holding a snake, warrior with knife and shield, semi-circular lotus flowers present a kaleidoscopic view of the colourful social life of

the age, apart from showing the resourcefulness of the artist in depicting through the medium of baked clay the moments of strife and struggle, joys and relishes of life. The small plaques and figures mostly depicting *yakshinis* with elaborate ornamentation, coiffure, designed robes; toy carts, rattles, potbellied Kubera figures, Ganga on *makara*, carved wheel, male and female torso and bust, floral designs, ornaments like ear-plugs, rings etc., dominate the terracotta collections which hail from Chandraketurgarh, Hadipur, Harinarayanpur and other important sites in south and north 24-Parganas. The eighteenth century temple-terracottas from Birbhum, Bankura, and Midnapore districts of West Bengal abound in mythological scenes like *Krishna-lila*, *Gangavatarana*, woman playing on musical instruments, syncretistic form of Krishna and Kali; Siva, Parvati, Balaram, Lakshmi and others.

The collection of Bengal's terracotta sculptures in the Indian Museum began as early as in the year 1921 with the acquisition of a small plaque depicting a man's face discovered in Tamluk, Midnapore, presented by the Superintendent of the Archaeological Survey of India, Eastern Circle. From Bangarh in the district of West Dinajpur, Sri K. N. Dikshit recovered a human head which was presented to the Indian Museum in 1922. A figure of Lakshmi, the goddess of bounty and wealth, found at the temple city of Vishnupur, in the district of Bankura, came to the Museum through the presentation of Mr. J. C. French, the then Collector of Bankura, in the year 1925. In the same year,



Government of India donated six pieces of carved bricks acquired from a *masjid* of Baba Adam at Kazi-Kasba in Rampal now in Bangladesh. The Museum collection has been enriched between 1936 and 1939 by a good number of interesting terracotta plaques depicting the icons of gods and goddesses, animal and human figures from Mahasthangarh, Paharpur and Mainamati following explorations and excavations at these ancient historical sites.

A few terracotta objects from Hilly, Baranagar, Baharampur in the northern part of West Bengal were received through gifts in the second half of the fifties of the century while some ornamental bricks from a place at Navagram in the district of Sylhet and an inscribed plaque showing the figure of Vishnu unearthed at Sabhar in Dhaka

were entered into the collection through permanent loan by the Archaeological Survey of India between 1933 and 1939. From Mahanad, Jangipara, Krishnapur and Pandua in Hooghly district of West Bengal terracotta objects with human figures and some semi-circular bricks, besides a few carved bricks from Krishnanagar in the district of Nadia, came to the possession of the Museum through the efforts of local zamindars and common people. The bulk of the collections from lower Gangetic Bengal coming mostly from surface explorations carried out at Chandraketugarh, Harinarayanpur, Hadipur and other nearby localities began to be acquired from the later part of the fifties till the beginning of the nineties.



# LIST OF BENGAL TERRACOTTA SCULPTURES IN THE COLLECTION OF THE INDIAN MUSEUM

<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
001	NS4972/A18968	Carved brick, 15.3 x 13.8 x 3.8 cm.	Rampal, Bangladesh	17.3.1925
002	NS4973/A18969	Carved brick, 13.5 x 10.5 x 4 cm.	Rampal, Bangladesh	- do -
003	NS4974/A18970	Carved brick, 13.7 x 11 x 3.5 cm.	Rampal, Bangladesh	- do -
004	NS4975/A18971	Carved brick, 14.7 x 11 x 4 cm.	Rampal, Bangladesh	- do -
005	NS4976/A18972	Carved brick, 13.2 x 10.8 x 4.5 cm.	Rampal, Bangladesh	- do -
006	NS4977/A18973	Carved brick, 14.5 x 14.5 x 3.5 cm.	Rampal, Bangladesh	- do -
007	8600/A15089	Plaque : Vishnu within an oval depressed area and inscription on both sides, 12.5 x 10.5 cm.	Sabhar, Dhaka, Bangladesh	20.3.1933
008	13088/A20130	Ornamental brick, 20.4 x 13 cm.	Sylhet, Bangladesh	6.12.1939
009	13089/A20111	Ornamental brick, 21.5 x 14.7 cm.	Sylhet, Bangladesh	- do -
010	Mn.1/A20060	Plaque : Bearded pot-bellied male figure 22.8 x 21 cm.	Mahasthan, Bogura, Bangladesh	
011	Mn.2/A20002	Broken plaque : Animal figure 22 x 20.5 cm.	Mahasthan, Bogura, Bangladesh	
012	Mn.3/A20061	Plaque : Wheel with sixteen spokes on a platform 22 x 20.4 cm.	Mahasthan, Bogura, Bangladesh	
013	11854/A24863	Ornamental brick 10.5 x 10.5 cm.	Mahasthan, Bogura, Bangladesh	24.3.1939
014	11856/A24927	Brick : Half lotus motif 17 x 10 cm.	Mahasthan, Bogura, Bangladesh	- do -
015	1185 7/A20072	Ornamental brick 21.4 x 10.2 cm.	Mahasthan, Bogura, Bangladesh	- do -
016	11859/A22163	Ornamental brick 11.5 x 12.5 cm.	Mahasthan, Bogura, Bangladesh	- do -
017	11860/A22164	Ornamental brick 11.5 x 14 cm.	Mahasthan, Bogura, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
018	11861/A14431	Ornamental brick 9 cm. in height	Mahasthan, Govinda Bhita, Bogura, Bangladesh	24.3.1939
019	11861/A14451	Ornamental brick 11 x 10 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
020	11862/A20070	Ornamental brick 19.5 x 8 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
021	11863/A22165	Ornamental brick 15.5 x 10 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
022	11864/A24862	Ornamental brick 13.5 x 7.5 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
023	11866/A22166	Ornamental brick 17 x 10 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
024	11867/A20066	Plaque : Couple 34.3 cm. in diameter	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
025	11870/A20064	Ornamental brick 14.8 x 11.6 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
026	11871/A20071	Ornamental brick 16.5 x 10 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
027	11872/A14430	Ornamental brick 7 x 10 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
028	11873/A14432	Ornamental brick 6 cm. in height	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
029	11874/A16233	Ornamental brick 13 cm. long	Mahasthan, Govinda Bhita, Bogura, Bangladesh	24.3.1939
030	11875/A24861	Ornamental brick 12 cm. long	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
031	11876/A20069	Ornamental brick 21.8 x 14.9 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
032	11879/A16235	Circular plaque : Head of a man	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
033	11880/A22167	Rectangular plaque : Part of a man 22.5 x 13.5 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
034	11881/A14433	Plaque : Head of a man 10 cm. in height	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
035	11882/A22168	Circular fragment : Lower part of a human figure 34 cm. in height	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
036	11883/A20064	Part of a human figure 19 x 18 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
037	11884/A20088	Square plaque : Female figure 21.6 x 20.4 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
038	11885/A20073	Square plaque : Figure of a dwarf 15 x 15 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
039	11886/A20063	Rectangular plaque : Bird motif 29 x 16.5 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
040	11888/A20065	Plaque : Floral decoration 27.9 x 21 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
041	11889/A22169	Plaque : Animal motif 17 x 16 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	24.3.1939
042	11890/A20067	Plaque : Female figure reclining on a couch 44.5 x 44 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
043	11891/A14452	Rectangular plaque : Stylized elephant (two pieces) 17.5 x 14 cm. & 17.5 x 20 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
044	11893/A22170	Plaque : Shardula head 26 x 22 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
045	11894	Two fragments of a carved brick 12 cm. long when joined together	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
045a	11894/A24873	Plaque : Floral decoration 18 x 16.5 cm.	Mahasthan, Govinda Bhita, Bogura, Bangladesh	- do -
046	Nil	Carved brick : Lotus in semi-circle 23.5 x 17 cm.	Mainamati, Comilla, Bangladesh	
047	Nil	Carved brick : Four flowers 23.5 x 11.5 cm.	Mainamati, Comilla, Bangladesh	
048	Nil	Plaque : Lotus in semi-circle 25 x 12.3 cm.	Mainamati, Comilla, Bangladesh	
049	Nil	Plaque : Humped bull 24.5 x 21.5 cm.	Mainamati, Comilla, Bangladesh	
050	Nil	Plaque : Flying figure with animal head 27 x 22.3 cm.	Mainamati, Comilla, Bangladesh	
051	Nil	Plaque : Peacock emitting garland of pearls 30.5 x 21 cm.	Mainamati, Comilla, Bangladesh	
052	Nil	Plaque : Lady doing her hair 22.5 x 22.5 cm.	Mainamati, Comilla, Bangladesh	
053	Nil	Plaque : Combat between a man and a lion 26.5 x 18.5 cm.	Mainamati, Comilla, Bangladesh	



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
054	Nil	Plaque : Elephant 24 x 20 cm.	Mainamati, Comilla, Bangladesh	
055	Nil	Plaque : Lion 25 x 20.5 cm.	Mainamati, Comilla, Bangladesh	
056	Nil	Plaque : Boar 28 x 20 cm.	Mainamati, Comilla, Bangladesh	
057	Nil	Plaque : Elephant 26.5 x 25 cm.	Mainamati, Comilla, Bangladesh	
058	Nil	Plaque : Bust of a male figure 28 x 19.5 cm.	Mainamati, Comilla, Bangladesh	
059	Nil	Plaque : Archer (headless) 31.5 x 21 cm.	Mainamati, Comilla, Bangladesh	
060	Nil	Plaque : Lotus and leaves on either side 28.5 x 19.5 cm.	Mainamati, Comilla, Bangladesh	
061	Nil	Plaque : Male figure holding a snake 27 x 22.5 cm.	Mainamati, Comilla, Bangladesh	
062	Nil	Plaque : Male figure holding a knife 26 x 21 cm.	Mainamati, Comilla, Bangladesh	
063	Nil	Plaque : Goose 25 x 21 cm.	Mainamati, Comilla, Bangladesh	
064	Nil	Plaque : Warrior with knife and shield 24 x 19 cm.	Mainamati, Comilla, Bangladesh	
065	Nil	Plaque : Drummer 28 x 22 cm.	Mainamati, Comilla, Bangladesh	
066	Nil	Plaque : Human headed lion 32.5 x 20.5 cm.	Mainamati, Comilla, Bangladesh	
067	9761/A20092	Plaque : Dog 27 x 23 cm.	Paharpur, Rajshahi, Bangladesh	16.11.1936
068	9762/A20100	Plaque : Elephant 26.5 x 22.2 cm.	Paharpur, Rajshahi, Bangladesh	- do -
069	9763/A20105	Plaque : Animal motif 34.5 x 22 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
070	9764	Plaque : Ram 29 x 25 cm.	Paharpur, Rajshahi, Bangladesh	16.11.1936
071	9765/A20075	Plaque : Elephant 33 x 26 cm.	Paharpur, Rajshahi, Bangladesh	- do -
072	9766/A20104	Plaque : Combat between a lion and an elephant 24 x 23.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
073	9767/A20086	Plaque : Lion attacking a male 21.5 x 18 cm.	Paharpur, Rajshahi, Bangladesh	- do -
074	9768/A20202	Plaque : Fish eating lotus stalk 26 x 25 cm.	Paharpur, Rajshahi, Bangladesh	- do -
075	9769/A20099	Plaque : Drummer beating two drums 28 x 21.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
076	9771/A20080	Plaque : Churning of milk by a lady 28.5 x 27 cm	Paharpur, Rajshahi, Bangladesh	- do -
077	9772/A20084	Plaque : Female figure dragging out a child from well, 36.2 x 25.8 cm	Paharpur, Rajshahi, Bangladesh	- do -
078	9773/A20078	Plaque : Travelling mendicant with belongings 34.4 x 27 cm.	Paharpur, Rajshahi, Bangladesh	- do -
079	9774/A20091	Plaque : Tortoise 26.5 x 20 cm.	Paharpur, Rajshahi, Bangladesh	- do -
080	9775/A25298	Plaque : Male with dagger 27.8 x 20.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
081	9776/A20107	Plaque : Archer 34 x 24.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
082	9777/A20106	Plaque : Warrior holding sword and shield 34 x 24 cm.	Paharpur, Rajshahi, Bangladesh	- do -
083	9778/A20082	Plaque : Couple 34.7 x 24.7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
084	9779/A20079	Plaque : Dancing lady 32 x 27 cm.	Paharpur, Rajshahi, Bangladesh	- do -
085	9780/A20085	Plaque : Standing male holding garland 35.5 x 24 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
086	9782/A16234	Plaque : Seated deity with jewel in hand 30 x 23.5 cm.	Paharpur, Rajshahi, Bangladesh	16.11.1936
087	9783/A20083	Plaque : Archer standing on lotus 34 x 27 cm.	Paharpur, Rajshahi, Bangladesh	- do -
088	9784/A20097	Plaque : Manjusri 34 x 28 cm.	Paharpur, Rajshahi, Bangladesh	- do -
089	9785/A20098	Plaque : Seated male holding lotus 34 x 28.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
090	9786/A20081	Plaque : Archer resting on a seat 35.5 x 26.7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
091	9787/A20076	Plaque : Archer 34.5 x 28 cm.	Paharpur, Rajshahi, Bangladesh	- do -
092	9788/A20101	Plaque : Seated male 28 x 24 cm.	Paharpur, Rajshahi, Bangladesh	- do -
093	9789/A24831	Plaque : Monkey 33.5 x 20.2 cm.	Paharpur, Rajshahi, Bangladesh	- do -
094	9790/A20093	Plaque : Peacock 35 x 33 cm.	Paharpur, Rajshahi, Bangladesh	- do -
095	9791/A20074	Plaque : Peacock	Paharpur, Rajshahi, Bangladesh	- do -
096	9792/A20103	Plaque : A plantain tree with six leaves 22 x 22 cm.	Paharpur Rajshahi, Bangladesh	- do -
097	9793/A20095	Plaque : Peacock eating flower 30.5 x 25 cm.	Paharpur, Rajshahi, Bangladesh	- do -
098	9794/A20094	Plaque : Peacock feeding younger one, 29 x 33.5 cm.	Paharpur Rajshahi, Bangladesh	- do -
099	9795/A20077	Plaque : Snake 34.5 x 23 cm.	Paharpur, Rajshahi, Bangladesh	- do -
100	12771/A14448	Ornamental brick 19 x 13 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
101	12772/A22171	Fragment of a brick 23.5 x 14 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
102	12774/A14450	Ornamental brick 19.8 x 22.8 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
103	12777	Ornamental brick 19 cm. long	Paharpur, Rajshahi, Bangladesh	- do -
104	12779/A22172	Ornamental brick 15 x 7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
105	12781/A14446	Ornamental brick 16 x 6.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
106	12782/A14441	Ornamental brick 15 x 8 cm.	Paharpur, Rajshahi, Bangladesh	- do -
107	12784/A24963	Fragment of an ornamental brick 10.8 x 9 cm.	Paharpur, Rajshahi, Bangladesh	- do -
108	12785/A22173	Fragment of an ornamental brick 7.5 x 7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
109	12786/A22174	Plaque : Bird feeding the younger one 24.5 x 23.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
110	12787/A14447	Plaque : Two heads joined together 13 x 12.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
111	12788/A20089	Plaque : Female deity in <i>abhaya mudra</i> 22 x 18.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
112	12789/A20090a	Plaque : Snake headed male playing cymbals 33.5 x 23.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
113	12790/A9002 0	Plaque : Four-armed, seated Ganesa 36 x 32.2 cm.	Paharpur, Rajshahi, Bangladesh	- do -
114	12791/A20090	Plaque : Shabara lady with her prey 37.5 x 26 cm.	Paharpur, Rajshahi, Bangladesh	- do -
115	12792/A22491	Plaque : Shabara couple 34 x 32 cm.	Paharpur, Rajshahi, Bangladesh	- do -
116	12793	Plaque : Emaciated saint 29 x 28 cm.	Paharpur, Rajshahi, Bangladesh	- do -
117	12795/A22175	Plaque : Human figure 30 x 27.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
118	12796/A22176	Plaque : Female head (profile) 34 x 24 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
119	12797/A24840	Plaque : Man striding to left 35 x 27.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
120	12799/A22177	Fragment of an ornamental brick 11.5 x 11 cm.	Paharpur, Rajshahi, Bangladesh	- do -
121	12800/A24846	Ornamental brick 16.2 x 9.3 cm.	Paharpur, Rajshahi, Bangladesh	- do -
122	12801/A24845	Ornamental brick : Floral scroll 21 x 8.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
123	12803/A24844	Ornamental brick 13 x 6.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
124	12804/A24847	Fragment of ornamental brick 14 x 7.7 x 6 cm.	Paharpur, Rajshahi, Bangladesh	- do -
125	12806/A24848	Ornamental brick with lotus design 8.5 x 8 cm.	Paharpur, Rajshahi, Bangladesh	- do -
126	12807/A24834	Plaque : Lotus 23.5 x 20.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
127	12808/A22178	Plaque : Plantain tree with seven leaves 26 x 20.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
128	12810/A22179	Plaque : Boar in profile 24 x 23.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
129	12811/A22180	Plaque : Upper part of a human figure 24.5 x 19 cm.	Paharpur, Rajshahi, Bangladesh	- do -
130	12812/A22182	Plaque : Plantain tree 35 x 21.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
131	12814/A24827	Plaque : Tree and fruit (in three parts) 36.5 x 21 cm.	Paharpur, Rajshahi, Bangladesh	- do -
132	12815/A24864	Plaque : Male figure with clasped hand over head 27.3 x 25.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
133	12816/A22828	Plaque : Fish emitting garland 28 x 21 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
134	12817/A24836	Plaque : Crown 32 x 26 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
135	12818/A24965	Plaque : Dancing male 29 x 21 cm.	Paharpur, Rajshahi, Bangladesh	- do -
136	12819/A24851	Plaque : Animal motif 34.5 x 29 cm.	Paharpur, Rajshahi, Bangladesh	- do -
137	12820/A24854	Plaque : Karttikeya 33.5 x 33 cm.	Paharpur, Rajshahi, Bangladesh	- do -
138	12821/A24842	Plaque : Lion (corner piece) damaged 36.5 in height	Paharpur, Rajshahi, Bangladesh	- do -
139	12822/A24839	Plaque : Male figure standing with bow and arrow 35.5 x 27.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
140	12823/A24852	Plaque : Female playing on cymbals 36 x 25 cm.	Paharpur, Rajshahi, Bangladesh	- do -
141	12825/A24825	Plaque : Karttikeya 34 x 30.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
142	12826/A22183	Plaque : Pair of monkeys 33 x 31 cm.	Paharpur, Rajshahi, Bangladesh	- do -
143	12828/A24843	Plaque : Upper part of a male figure 24 x 23 cm.	Paharpur, Rajshahi, Bangladesh	- do -
144	12827/A24841	Plaque : Churning of milk by a lady 24.9 x 23 cm.	Paharpur, Rajshahi, Bangladesh	- do -
145	12829/A24829	Plaque : King with elephant rider and attendants 27.3 x 22 cm.	Paharpur, Rajshahi, Bangladesh	- do -
146	12830/A22184	Plaque : stupa (damaged) 29 x 19.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
147	12831/A24830	Plaque : Fierce looking male with two snakes in mouth ( <i>kirttimukha</i> ), 19 x 20 cm.	Paharpur, Rajshahi, Bangladesh	- do -
148	12832/A24826	Plaque : Warrior, seated 35 x 32 cm.	Paharpur, Rajshahi, Bangladesh	- do -
149	12833/A22185	Plaque : Warrior 33 x 22.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
150	12834/A24849	Plaque : Female figure striding to left 27.5 x 20.5 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
151	12835/A22186	Plaque : Female figure, kneeling 28.5 x 16 cm.	Paharpur, Rajshahi, Bangladesh	- do -
152	12836/A22187	Plaque : Upper part of a male figure 20.5 x 19 cm.	Paharpur, Rajshahi, Bangladesh	- do -
153	12837/A24835	Plaque : Seated male 20.2 x 17 cm.	Paharpur, Rajshahi, Bangladesh	- do -
154	12838/A22189	Plaque : Upper part of a human figure 19 x 14 cm.	Paharpur, Rajshahi, Bangladesh	- do -
155	12839/A24837	Stupa fragment : Three rows of Buddha figure 37.5 x 32.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
156	12840/A22833	Plaque : Seated male with two vessels on each side 35 x 32 cm.	Paharpur, Rajshahi, Bangladesh	- do -
157	12841/A24855	Plaque : monkey couple 32 x 31 cm.	Paharpur, Rajshahi, Bangladesh	- do -
158	12842/A22829	Plaque : amorous couple 27 x 24 cm.	Paharpur, Rajshahi, Bangladesh	- do -
159	12843/A24833	Plaque : Warrior 22 x 21.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
160	12844/A22188	Plaque : Man playing cymbals 22 x 15 cm.	Paharpur, Rajshahi, Bangladesh	- do -
161	12845/A24832	Plaque : <i>Mukhalinga</i> 24.5 x 15 cm.	Paharpur, Rajshahi, Bangladesh	- do -
162	12846/A22190	Plaque : Plant with leaves and flowers 34.5 x 29.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
163	12847/A24838	Plaque : Peacock 33 x 22 cm.	Paharpur, Rajshahi, Bangladesh	- do -
164	12848/A24853	Plaque : Boar 34.7 x 32 cm.	Paharpur, Rajshahi, Bangladesh	- do -
165	12849/A22191	Plaque : Lower part of a drummer (damaged) 20.5 x 15.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -



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166	12850/A24828	Plaque : Upper part of a demon 22 x 15 cm.	Paharpur, Rajshahi, Bangladesh	27.3.1939
167	12851/A24850	Plaque : Moustached and bearded head 11.3 cm. in height	Paharpur, Rajshahi, Bangladesh	- do -
168	12852/A22181	Plaque : Head of lion 26 x 16 cm.	Paharpur, Rajshahi, Bangladesh	- do -
169	12853/A22306	Plaque : Human head 8 cm. in height	Paharpur, Rajshahi, Bangladesh	- do -
170	12854/A22307	Human head 9 cm. in height	Paharpur, Rajshahi, Bangladesh	- do -
171	12855/A24980	Human head 8.4 x 7.6 cm.	Paharpur, Rajshahi, Bangladesh	- do -
172	12856/A6390	Votive tablet : Buddha in earth touching attitude creed inscribed below, 10 x 9 cm.	Paharpur, Rajshahi, Bangladesh	- do -
173	12857	Plaque : Eight-armed Tara and Buddhist creed 5 x 4.7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
174	12858/A22312	Plaque : Eight-armed Tara and Buddhist creed	Paharpur, Rajshahi, Bangladesh	- do -
175	12859	Plaque : Eight-armed Tara and Buddhist creed 4.8 x 4.5 cm.	Paharpur, Rajshahi, Bangladesh Paharpur	- do -
176	12891/A24966	Plaque : Dancing male Paharpur, 27 x 24.5 cm.	Paharpur, Rajshahi, Bangladesh	- do -
177	12892/A22192	Plaque : Warrior with sword and shield 27 x 26 cm.	Paharpur, Rajshahi, Bangladesh	- do -
178	12893/A22193	Plaque : Snake around a lion 23.5 x 23 cm.	Paharpur, Rajshahi, Bangladesh	- do -
179	12794/A20087	Plaque : Shabara couple 33.5 x 30.7 cm.	Paharpur, Rajshahi, Bangladesh	- do -
180	4270/Pr.1 A20096	Plaque : Seated male holding 35 x 28 cm.	Paharpur, Rajshahi, Bangladesh	- do -
181	P345	Plaque 18 x 21 cm.	Paharpur (?) Rajshahi, Bangladesh	



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182	Nil	Votive tablet : Eight-armed seated Tara 5.4 x 4.8 cm.	Paharpur (?) Rajshahi, Bangladesh	
183	PS. 63	Votive tablet : Eight-armed seated Tara 5.4 x 3 cm.	Paharpur (?) Rajshahi, Bangladesh	
184	113	Votive tablet : Eight-armed seated Tara 4.9 x 4.3 cm.	Paharpur (?) Rajshahi, Bangladesh	
185	156	Votive tablet : Eight-armed seated Tara 4.9 x 4.6 cm.	Paharpur (?) Rajshahi, Bangladesh	
186	PS. 65	Votive tablet : Eight-armed seated Tara 5.1 x 4.3 cm.	Paharpur (?) Rajshahi, Bangladesh	
187	PS. 173	Votive tablet : Eight-armed seated Tara 4.9 x 4.3 cm.	Paharpur, Rajshahi, Bangladesh	
188	PS. 175	Votive tablet : Eight-armed seated Tara 5.1 x 4.5 cm.	Paharpur (?) Rajshahi, Bangladesh	
189	PS. 174	Votive tablet : Eight-armed seated Tara 4.9 x 4.3 cm.	Paharpur (?) Rajshahi, Bangladesh	
190	PS. 172	Votive tablet : Eight-armed seated Tara 5.1 x 4.6 cm.	Paharpur (?) Rajshahi, Bangladesh	
191	P81	Buddha (head lost) inscribed 6 x 5 cm.	Paharpur (?) Rajshahi, Bangladesh	
192	Nil/fld. no. 1874	Plaque : Buddhas 17 cm. long	Paharpur (?) Rajshahi, Bangladesh	
193	A24824	Plaque : Archer 31 x 23.5 cm.	Paharpur (?) Rajshahi, Bangladesh	
194	P87/A24823	Plaque : Dancing female 30 x 26 cm.	Paharpur Rajshahi, Bangladesh	
195	Nil/fld.no P1383	Carved brick 17 x 10 cm.	Paharpur (?) Rajshahi, Bangladesh	
196	P494	Human head 8.5 cm. in height	Paharpur (?) Rajshahi, Bangladesh	
197	P710	Small brick, carved 9 x 8.5 cm.	Paharpur (?) Rajshahi, Bangladesh	
198	Nil/fld. no. 159	Tile 39 x 25 cm.	Paharpur (?) Rajshahi, Bangladesh	



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
199	Nil/fld.no. 1177	Carved brick 13 x 9 cm.	Paharpur (?) Rajshahi, Bangladesh	
200	P261	Plaque 25 x 16 cm.	Paharpur (?) Rajshahi, Bangladesh	
201	P142	Plaque 29 x 22 cm.	Paharpur (?) Rajshahi, Bangladesh	
202	P338	Plaque 21 x 22 cm.	Paharpur (?) Rajshahi, Bangladesh	
203	P399	Plaque 35 x 20 cm.	Paharpur (?) Rajshahi, Bangladesh	
204	P124	Plaque 16 x 19 cm.	Paharpur (?) Rajshahi, Bangladesh	
205	P102	Plaque 32 x 20 cm.	Paharpur (?) Rajshahi, Bangladesh	
206	P1050	Plaque 25 x 14 cm.	Paharpur (?) Rajshahi, Bangladesh	
207	P437	Plaque 35 x 20 cm.	Paharpur (?) Rajshahi, Bangladesh	
208	P123	Plaque : Male figure 24 x 27 cm.	Paharpur (?) Rajshahi, Bangladesh	
209	P108	Plaque 24 x 21 cm.	Paharpur (?) Rajshahi, Bangladesh	
210	NS.3711/A13754	Human face 3 x 2.5 cm.	Tamluk, Midnapur, West Bengal	13.5.1921
211	71/4	Dvarapalika 46 cm. in height	Midnapur, West Bengal	21.3.1971
212	71/5	Dvarapala 44.6 cm. in height	Midnapur, West Bengal	- do -
213	71/6	Dasabhujā 44.5 x 36 cm.	Midnapur, West Bengal	- do -
214	71/7	Krishna-Kali 54 x 32.5 cm.	Midnapur, West Bengal	- do -



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215	71/8	Gaur Nitai 53.5 x 37 cm.	Midnapur, West Bengal	21.3.1971
216	13658/A8391	Human head 1 x 2 cm.	Hilly, North Bengal	17.10.1955
217	NS.3838/A20390	Human head 23.5 x 17 cm.	Bangarh, Dinajpur	2.3.1922
218	69/1	Satidaha plaque 45 x 44 cm.	Ghoshpara, Bally, Howrah	4.11.1969
219	72/3	Inscribed brick 18 x 17.5 cm.	Purulia West Bengal	4.9.1972
220	13990/A21713	Ornamental brick 10.5 x 6.8 cm.	Baranagar, West Bengal	14.6.1957
221	68/3	Brick with floral design	Hiranmaypur, 24 Parganas	4.4.1968
222	68/4	Tile : Pilaster	Hiranmaypur, 24 Parganas	- do -
223	68/5	Tile : Pilaster	Hiranmaypur, 24 Parganas	- do -
224	68/6	Brick : Floral motif	Hiranmaypur, 24 Parganas	- do -
225	68/1	Rider on a caparisoned horse	Masjadbadi, 24 Parganas	3.2.1968
226	68/2	Rampant lion trampling on a couchant elephant	Masjadbadi, 24 Parganas	- do -
227	68/10	Ear stud with floral motif	Masjadbadi, 24 Parganas	15.6.1968
228	68/36	Animal figure	Masjadbadi, 24 Parganas	2.6.1934
229	9105/A16249	Matrix of a standing male 11.1 x 7.9 cm.	Mahanad, Hooghly	
230	A23550	Female figurine 7.3 x 7.9 cm.	Mahanad, Hooghly	



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231	A23551	Human head 5.9 x 3.9 cm.	Mahanad, Hooghly	
232	A23552	Human head 5.6 x 3.8 cm.	Mahanad, Hooghly	
233	A23553	Human head 3.9 x 4.1 cm.	Mahanad, Hooghly	
234	A23549	Female figurine 9.6 x 3.9 cm.	Mahanad, Hooghly	
235	9106/A16202	Female figure with left hand on hip and right stretched down, 8 cm. in height	Mahanad, Hooghly	
236	13669/A8386	Human figurine 8.7 x 5.6 cm.	Mahanad, Hooghly	11.6.1956
237	13670/A8387	Human head 5.5 x 2.5 cm.	Mahanad, Hooghly	11.6.1956
238	13668/A8388	Human figurine 5.10 x 4.8 cm.	Mahanad, Hooghly	- do -
239	13992/A22196	Semi-circular brick 11 x 9.5 cm.	Krishnapur, Hooghly	14.6.1957
240	13090/A7192	Figurine 13.5 x 7 cm.	Jangipara, Hooghly	6.12.1939
241	85/14	Human head 11 cm. in height	Pandua, Hooghly	
242	Kr.1/A24996	Carved brick 20 x 10.5 cm.	Krishnanagar, Nadia	
243	Kr.8/A24998	Carved brick 17.5 x 5.5 cm.	Krishnanagar, Nadia	
244	Kr.9/A24999	Carved brick 18.5 x 15 cm.	Krishnanagar, Nadia	
245	Kr.10/A25261	Carved brick 15.5 x 11 cm.	Krishnanagar, Nadia	
246	Kr.11/A25262	Ornamental brick 14.5 x 10.5 cm.	Krishnanagar, Nadia	



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247	14043/A23091	Female head 5.6 x 3.7 cm.	Harinarayanpur, 24 Parganas	16.12.1957
248	91/3	Female bust 10 x 7.5 cm.	Harinarayanpur, 24 Parganas	20.2.1992
249	91/4	Female bust 8.5 x 7.5 cm.	Harinarayanpur, 24 Parganas	- do -
250	91/5	Female bust 10 x 7.5 cm.	Harinarayanpur, 24 Parganas	- do -
251	91/6	Humped bull 10 x 8 cm.	Harinarayanpur, 24 Parganas	- do -
252	91/8	Crowned human head 13 x 8 cm.	Harinarayanpur, 24 Parganas	- do -
253	91/9	Upper right half of a female figure 12 x 7.5 cm.	Harinarayanpur, 24 Parganas	- do -
254	91/16	Human head 9.5 cm. in height	Harinarayanpur, 24 Parganas	- do -
255	91/25	Female figure 17.7 x 7.5 cm.	Harinarayanpur, 24 Parganas	- do -
256	91/28	Animal figurine 12 x 8 cm.	Harinarayanpur, 24 Parganas	- do -
257	91/29	Animal figurine 1 5.5 x 7.5 cm.	Harinarayanpur, 24 Parganas	- do -
258	91/24	Female figure, broken into two parts 8.5 x 6.5 cm & 6.8 x 9 cm.	Harinarayanpur, 24 Parganas	- do -
259	91/23	Bust of a male figure 11.5 x 10 cm.	Harinarayanpur, 24 Parganas	- do -
260	91/22	Bust of a male figure 8.2 x 7 cm.	Harinarayanpur, 24 Parganas	- do -
261	91/21	Bust of a female figure 10 x 7.2 cm.	Harinarayanpur, 24 Parganas	- do -
262	91/20	Bust of a female figure 9.7 x 7 cm.	Harinarayanpur, 24 Parganas	- do -



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263	91/18	Bust of a female figure 12.5 x 9 cm.	Harinarayanpur, 24 Parganas	20.2.1992
264	91/17	Human head 15.5 cm. in height	Harinarayanpur, 24 Parganas	- do -
265	14205/A23155	Ear ornament 3.4 cm. in height	Harinarayanpur, 24 Parganas	6.8.1958
266	14206/A23132	Ear ornament, decorated 3.1 cm. in diameter	Harinarayanpur, 24 Parganas	- do -
267	13727/A22538	Two elephant riders 4.2 x 5.1 cm.	Hadipur, 24 Parganas	21.3.1957
268	13728/A22537	Mithuna couple 6.5 x 4.8 cm.	Hadipur, 24 Parganas	- do -
269	89/1	Plaque : Female figure broken in three pieces 8.9 x 6.5 cm.	Hadipur, 24 Parganas	19.5.1989
270	89/2	Relief : Male head 3.3 x 3.8 cm.	Hadipur, 24 Parganas	- do -
271	89/3	Human head in relief 5.3 x 3.2 cm.	Hadipur, 24 Parganas	- do -
272	89/4	Plaque : Erotic scene 5.8 x 6.2 cm.	Hadipur, 24 Parganas	- do -
273	89/5	Plaque : Erotic scene 6.2 x 4.2 cm.	Hadipur, 24 Parganas	- do -
274	89/6	Plaque : Hunting scene 7 x 5.5 cm.	Hadipur, 24 Parganas	- do -
275	89/7	Plaque : Lower part of a human figure 9.7 x 8 cm.	Hadipur, 24 Parganas	- do -
276	89/8	Plaque : Human head 5 x 5 cm.	Hadipur, 24 Parganas	- do -
277	89/9	Plaque : Human head 4 x 3.2 cm.	Hadipur, 24 Parganas	- do -
278	89/10	Circular piece with floral motif 6 cm. in diameter	Hadipur, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
279	89/11	Plaque : Elephant 6.5 x 5.3 cm.	Hadipur, 24 Parganas	19.5.1989
280	89/48	Ram head 9.9 cm. in height	Hadipur, 24 Parganas	19.7.1989
281	89/49	Plaque : Yakshi head 5.8 x 4.2 cm.	Hadipur, 24 Parganas	- do -
282	89/50	Plaque : Carved fragment 5 x 3.5 cm.	Hadipur, 24 Parganas	- do -
283	89/51	Plaque : Erotic scene 5 x 4.5 cm.	Hadipur, 24 Parganas	- do -
284	89/52	Plaque : Erotic scene 5.2 x 4.5 cm.	Hadipur, 24 Parganas	- do -
285	89/53	Plaque : Upper part of human couple 6.3 x 4.4 cm.	Hadipur, 24 Parganas	- do -
286	89/54	Plaque : Hanuman in Asoka forest	Hadipur, 24 Parganas	- do -
287	13736/A23118	Female figure (headless) 12.5 x 5.2 cm.	Chandraketugarh, 24 Parganas	17.4.1957
288	13737/A23120	Female figure upto waist 9.5 x 7.4 cm.	Chandraketugarh, 24 Parganas	- do -
289	13738/A22524	Hind part of an animal 8 x 4.7 cm.	Chandraketugarh, 24 Parganas	- do -
290	13739/A22523	Head of an animal 5.5 x 2.5 cm.	Chandraketugarh, 24 Parganas	- do -
291	13929/A22542	Ram head 9.9 x 8 cm.	Chandraketugarh, 24 Parganas	3.5.1957
292	13930/A23116	Elephant with traces of black glaze 12.9 x 11.8 cm.	Chandraketugarh, 24 Parganas	- do -
293	13932/A22997	Toy chariot (winged chariot) 13 x 8.9 cm.	Chandraketugarh, 24 Parganas	29.5.1957
294	13933/A22543	Toy chariot : Horse 14.6 x 7.1 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
295	13935/A22545	Toy chariot : Winged elephant 14 x 8.6 cm.	Chandraketugarh, 24 Parganas	29.5.1957
296	13936/A22546	Toy chriot : Ram 13.1 x 8.2 cm.	Chandraketugarh, 24 Parganas	- do -
297	13937/A22547	Toy chariot : Ram head 7.4 x 6.3 cm.	Chandraketugarh, 24 Parganas	- do -
298	13938/A22548	Toy chariot : Horse 11.4 x 5.6 cm.	Chandraketugarh, 24 Parganas	- do -
299	13939/A22549	Toy cart : Ram head 8 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
300	13940/A23119	Plaque : Man holding an umbrella 6.7 x 5.7 cm.	Chandraketugarh, 24 Parganas	- do -
301	13941/A22550	Part of a human hand 6.6 x 6.4 cm.	Chandraketugarh, 24 Parganas	- do -
302	13942/A22551	Human head 6.9 x 5.1 cm.	Chandraketugarh, 24 Parganas	- do -
303	13943/A20552	Human head 5.2 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
304	13944/A22554	Human head 4.1 x 3.4 cm.	Chandraketugarh, 24 Parganas	- do -
305	13934/A22544	Toy chariot : Winged elephant 15.2 x 10 cm.	Chandraketugarh, 24 Parganas	- do -
306	14036/A23696	Plaque : Mithuna couple 7 x 5.7 cm.	Chandraketugarh, 24 Parganas	10.10.1957
307	14042/A23093	Plaque : Rhinoceros 5.8 x 5 cm.	Chandraketugarh, 24 Parganas	20.11.1957
308	14048/A23098	Human head 5.3 x 3.5 cm.	Chandraketugarh, 24 Parganas	- do -
309	14049/A23097	Human head 3.8 x 5.4 cm.	Chandraketugarh, 24 Parganas	7.1.1958
310	14050/A23095	Plaque : Female figurine 6.4 x 5 cm.	Chandraketugarh, 24 Parganas	20.1.1958



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
311	14052/A23094	Bust of a female figure 5.5 x 3.8 cm.	Chandraketugarh, 24 Parganas	20.1.1958
312	14053/A23092	Two parrots in a panel 5.3 x 4.4 cm.	Chandraketugarh, 24 Parganas	- do -
313	14197/A23146	Plaque : Male torso 11.1 x 7.6 cm.	Chandraketugarh, 24 Parganas	31.7.1958
314	14198/A23166	Plaque : Male figure with turban 6.3 x 4.1 cm.	Chandraketugarh, 24 Parganas	- do -
315	14199/A23090	Plaque : Hind part of an animal with rider 6.8 x 4.5 cm.	Chandraketugarh, 24 Parganas	- do -
316	14204/A23099	Female bust 4.5 x 3 cm.	Harinarayanpur, 24 Parganas	6.8.1958
317	14296/A23107	Plaque : Female figure holding child	Chandraketugarh, 24 Parganas	24.6.1959
318	14297/A23101	Kubera 9.2 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
319	14317/A23104	Bust of a female figure 8 x 5.7 cm.	Chandraketugarh, 24 Parganas	14.7.1959
320	14318/A23103	Bust of a female figurine 6.7 x 7.2 cm.	Chandraketugarh, 24 Parganas	- do -
321	14465/A23547	Plaque : Elephant 7.1 x 5.5 cm.	Chandraketugarh, 24 Parganas	31.8.1960
322	85/5	Plaque : Head of a figure with elaborate coiffure 6.5 x 5.3 cm.	Chandraketugarh, 24 Parganas	
323	85/6	Plaque : Torso of a female 9 x 6 cm.	Chandraketugarh, 24 Parganas	
324	85/12	Part of a human figure 7.5 x 6 cm.	Chandraketugarh, 24 Parganas	
325	85/11	Middle portion of a figure 6 x 5 cm.	Chandraketugarh, 24 Parganas	
326	85/13	Torso of a male figure 13 cm. in Height	Chandraketugarh, 24 Parganas	
327	89/18	Plaque : Female figure 8.5 x 6.5 cm.	Chandraketugarh, 24 Parganas	19.5.1989
328	89/19	Plaque : Erotic scene 6.9 x 6.2 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
329	89/20	Plaque : Erotic scene 6.3 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
330	89/21	Plaque : Erotic scene 5.4 x 3.8 cm.	Chandraketugarh, 24 Parganas	- do -
331	89/22	Plaque : Erotic scene 5.8 x 5.2 cm.	Chandraketugarh, 24 Parganas	- do -
332	89/23	Plaque : Erotic scene 6.3 x 5.3 cm.	Chandraketugarh, 24 Parganas	- do -
333	89/24	Plaque : Erotic scene 5.6 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
334	89/25	Plaque : Upper part of a human figure 6 x 6 cm.	Chandraketugarh, 24 Parganas	- do -
335	89/26	Plaque : Female figure with an elephant 5 x 4.7 cm.	Chandraketugarh, 24 Parganas	- do -
336	89/27	Plaque : Human head 6.5 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
337	89/28	Plaque : Bust of a yaksha 6.1 x 5.4 cm.	Chandraketugarh, 24 Parganas	- do -
338	89/29	Plaque : Winged male 8 x 7 cm.	Chandraketugarh, 24 Parganas	- do -
339	89/30	Plaque : Standing female (headless) 9.9 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
340	89/31	Plaque : Lower part of a yakshi 13 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
341	89/32	Toy cart (damaged) : Elephant rider 15.5cm. in height	Chandraketugarh, 24 Parganas	- do -
342	90/36	Part of toy-cart : Head of elephant 15.5 x 10 cm.	Chandraketugarh, 24 Parganas	13.3.1991
343	90/37	Part of a toy cart 10.2 x 7 cm	Chandraketugarh, 24 Parganas	13.3.1991
344	90/38	Elephant head 11.5 x 10.3 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
345	90/39	Elephant 6.9 x 12.5 x 4.5 cm.	Chandraketugarh, 24 Parganas	- do -
346	90/40	Elephant 9.9 x 10.2 x 5.3 cm.	Chandraketugarh, 24 Parganas	- do -
347	90/41	Part of a toy cart : Ram head 12.5 x 7.8 cm.	Chandraketugarh, 24 Parganas	- do -
348	90/42	Headless standing figure 11.5 cm. in height	Chandraketugarh, 24 Parganas	- do -
349	90/43	Plaque : Couple seated on an animal 9 x 7.3 cm.	Chandraketugarh, 24 Parganas	- do -
350	90/44	Plaque : Human couple 8 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
351	90/45	Plaque : Human figure 6.6 x 5.3 cm.	Chandraketugarh, 24 Parganas	- do -
352	90/46	Plaque : Human foot wearing ornament 7.5 x 4.5 cm.	Chandraketugarh, 24 Parganas	- do -
353	90/47	Fragment of a pot-bellied figure 7 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
354	90/48	Plaque : Human head 4.6 x 6.2 cm.	Chandraketugarh, 24 Parganas	- do -
355	90/49	Plaque : Human head (defaced) 5.3 x 4.2 cm.	Chandraketugarh, 24 Parganas	- do -
356	90/50	Plaque : Female bust 6.5 x 5.2 cm.	Chandraketugarh, 24 Parganas	- do -
357	90/51	Human bust 5.2 x 3.2 cm.	Chandraketugarh, 24 Parganas	- do -
358	90/52	Plaque : Human head 6 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
359	90/53	Plaque : Human head 7 x 5.2 cm.	Chandraketugarh, 24 Parganas	13.3.1991
360	90/54	Plaque Karttikeya (defaced) 5.2 x 5.6 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
361	90/55	Plaque : Two human figures 5.5 x 5.3 cm.	Chandraketugarh, 24 Parganas	- do -
362	90/56	Plaque : Monkey riding on a crocodile 4.8 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
363	90/57	Plaque : Lady riding a crocodile 6 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
364	90/58	Damaged plaque : Erotic scene 7 x 6.3 cm.	Chandraketugarh, 24 Parganas	- do -
365	90/59	Plaque : Erotic scene 4.6 x 4.2 cm.	Chandraketugarh, 24 Parganas	- do -
366	90/60	Plaque : Erotic scene 6.3 x 4.3 cm.	Chandraketugarh, 24 Parganas	- do -
367	90/61	Plaque : Erotic scene 4.2 x 3.6 cm.	Chandraketugarh, 24 Parganas	- do -
368	96/62	Plaque : Erotic scene 5.3 x 3.8 cm.	Chandraketugarh, 24 Parganas	- do -
369	90/63	Plaque : Erotic scene 5 x 4.8 cm.	Chandraketugarh, 24 Parganas	- do -
370	90/64	Plaque : Erotic scene 5.2 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
371	90/65	Plaque : Human figures (defaced) 7 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
372	90/66	Plaque : Human figures (defaced) 7 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
373	90/67	Plaque : Two armed female figure (upper part) 6 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
374	90/139	Plaque : Ganga on makara 7 x 4.8 cm.	Chandraketugarh, 24 Parganas	- do -
375	90/140	Plaque : Upper part of a male figure 7.3 x 4.3 cm.	Chandraketugarh, 24 Parganas	13.3.1991
376	90/141	Plaque : Bird-faced lion 7.5 x 3.8 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
377	90/142	Plaque : Erotic scene 5.6 x 6.1 cm.	Chandraketugarh, 24 Parganas	- do -
378	90/143	Plaque : Head of yakshi (in two pieces) 8.3 x 9.5 cm. when joined	Chandraketugarh, 24 Parganas	- do -
379	90/144	Plaque : Female torso (in two parts) 16.7 x 11. 8 cm.	Chandraketugarh, 24 Parganas	- do -
380	90/145	Plaque : Female torso 13 x 8.7 cm.	Chandraketugarh, 24 Parganas	- do -
381	90/146	Plaque : Lower part of a female figure 13.5 x 7.6 cm.	Chandraketugarh, 24 Parganas	- do -
382	90/147	Plaque : Lower part of a female figure 9.2 x 6.9 cm.	Chandraketugarh, 24 Parganas	- do -
383	90/148	Plaque : Lower part of a female figure with attendant, 10 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
384	90/176	Elephant toy cart 13.5 cm. in height	Chandraketugarh, 24 Parganas	- do -
385	90/177	Toy cart : Elephant and rider 18.8 x 8.5 cm.	Chandraketugarh, 24 Parganas	- do -
386	90/178	Plaque : Two defaced human figures 5 x 6.2 cm.	Chandraketugarh, 24 Parganas	- do -
387	90/179	Plaque : Upper part of a female figure 5.5 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
388	90/180	Carved wheel (damaged) 8.8 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
389	90/183	Plaque : Horse rider 5.1 x 5.8 cm.	Chandraketugarh, 24 Parganas	- do -
390	90/310	Ram head 7.8 x 9.9 cm.	Chandraketugarh, 24 Parganas	- do -
391	90/312	Elephant rattle 9.5 cm. in height	Chandraketugarh, 24 Parganas	13.3.1991
392	90/313	Elephant rattle 10.4 x 11.1 x 4.2 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
393	90/314	Toy cart : Elephant 11.4 x 6 cm.	Chandraketugarh, 24 Parganas	- do -
394	90/315	Seated yaksha (partly broken) 11.5 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
395	90/316	Seated yaksha (partly broken) 10.8 cm. in height	Chandraketugarh, 24 Parganas	- do -
396	90/317	Seated yaksha 13 cm. in height	Chandraketugarh, 24 Parganas	- do -
397	90/318	Seated yaksha (broken) 9.4 cm. in height	Chandraketugarh, 24 Parganas	- do -
398	90/319	Seated yaksha 10.6 cm. in height	Chandraketugarh, 24 Parganas	- do -
399	90/320	Seated yaksha 7.9 x 4.9 cm.	Chandraketugarh, 24 Parganas	- do -
400	90/321	Plaque : Female torso 10.9 x 9.9 cm.	Chandraketugarh, 24 Parganas	- do -
401	90/322	Plaque : Female torso 11.7 x 10.2 cm.	Chandraketugarh, ' 24 Parganas	- do -
402	90/323	Plaque : Lower part of a female figure 13.1 x 11 cm.	Chandraketugarh, 24 Parganas	- do -
403	90/324	Plaque : Lower part of a female figure 17.5 x 10.5 cm.	Chandraketugarh, 24 Parganas	- do -
404	90/325	Plaque : Lower part of a female figure 16.5 x 6.4 cm.	Chandraketugarh, 24 Parganas	- do -
405	90/326	Plaque : Lower part of a female figure 12.7 x 8.8 cm.	Chandraketugarh, 24 Parganas	- do -
406	90/327	Plaque : Lower part of a female figure 19.7 x 10.6 cm.	Chandraketugarh, 24 Parganas	- do -
407	90/328	Plaque : Lower part of a male figure 13.4 x 11 cm.	Chandraketugarh, 24 Parganas	13.3.1991
408	90/329	Plaque : Lower part of a female figure 9 x 7.4 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
409	90/330	Plaque Female torso 8.9 x 5.8 cm.	Chandraketugarh, 24 Parganas	- do -
410	90/331	Plaque : Lower part of a male figure 10.4 x 9.6 cm.	Chandraketugarh, 24 Parganas	- do -
411	90/332	Plaque : Female torso 12.3 x 8.5 cm.	Chandraketugarh, 24 Parganas	- do -
412	90/333	Plaque : Right half of a female figure, (defaced) 18 x 7 cm.	Chandraketugarh, 24 Parganas	- do -
413	90/334	Plaque : Human feet 17.8 x 7.1 cm.	Chandraketugarh, 24 Parganas	- do -
414	90/335	Plaque : Human legs 9.8 x 9.8 cm.	Chandraketugarh, 24 Parganas	- do -
415	90/336	Plaque : Human legs (two parts) 7.8 x 11.2 cm. & 6 x 12 cm.	Chandraketugarh, 24 Parganas	- do -
416	90/337	Plaque : Lower part of a female figure 16.7 x 10.9 cm.	Chandraketugarh, 24 Parganas	- do -
417	90/338	Plaque : Male figure 10.2 x 11.7 cm.	Chandraketugarh, 24 Parganas	- do -
418	90/339	Plaque : Male figure 9.8 x 7.8 cm.	Chandraketugarh, 24 Parganas	- do -
419	90/340	Plaque : Yakshi head 5.7 x 9.9 cm.	Chandraketugarh, 24 Parganas	- do -
420	90/341	Plaque : Yakshi head 6.2 x 9 cm.	Chandraketugarh, 24 Parganas	- do -
421	90/342	Plaque : Yakshi head 7 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
422	90/343	Plaque : Yakshi head 6.8 x 9 cm.	Chandraketugarh, 24 Parganas	- do -
423	90/344	Plaque : Yakshi head 7.5 x 5 cm.	Chandraketugarh, 24 Parganas	13.3.1991
424	90/345	Plaque : Yakshi head 6.8 x 5.5 cm.	Chandraketugarh, 24 Parganas	- do -
425	90/346	Plaque : Yakshi bust 11.2 x 8.8 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
426	90/347	Plaque : Yakshi bust 8.5 x 9.2 cm.	Chandraketugarh, 24 Parganas	- do -
427	90/348	Plaque : Yakshi bust 9 x 8.7 cm.	Chandraketugarh, 24 Parganas	- do -
428	90/349	Plaque : Yakshi bust 9.8 x 9 cm.	Chandraketugarh, 24 Parganas	- do -
429	90/350	Plaque : Yakshi bust with elaborate coiffure 8.7 x 8.6 cm.	Chandraketugarh, 24 Parganas	- do -
430	90/351	Plaque : Yakshi bust with elaborate coiffure 9.3 x 9.8 cm.	Chandraketugarh, 24 Parganas	- do -
431	90/352	Plaque : Yakshi bust with elaborate coiffure 8.3 x 7 cm.	Chandraketugarh, 24 Parganas	- do -
432	90/353	Plaque : Yakshi bust 9.5 x 8.2 cm.	Chandraketugarh, 24 Parganas	- do -
433	90/354	Plaque : Yakshi figure (legs broken) 12 x 10.5 cm.	Chandraketugarh, 24 Parganas	- do -
434	90/355	Plaque : Human head 10 x 6.8 cm.	Chandraketugarh, 24 Parganas	- do -
435	90/356	Plaque : Yakshi head with five pins on head 6.5 x 5.7 cm.	Chandraketugarh, 24 Parganas	- do -
436	90/357	Plaque : Yakshi head 8 x 6 cm.	Chandraketugarh, 24 Parganas	- do -
437	90/358	Plaque : Yaksha head with a big e turban lik headdress, 10.2 x 11.2 cm.	Chandraketugarh, 24 Parganas	- do -
438	90/359	Plaque : Yaksha head 9 x 7.4 cm.	Chandraketugarh, 24 Parganas	- do -
439	90/360	Plaque : Yaksha head 6.5 x 6.8 cm.	Chandraketugarh, 24 Parganas	13.3.1991
440	90/361	Plaque : Yaksha head 7.5 x 6.5 cm.	Chandraketugarh, 24 Parganas	- do -
441	90/362	Plaque : Yaksha head 6.4 x 6 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
442	90/363	Plaque : Yaksha head 6.6 x 6.8 cm.	Chandraketugarh, 24 Parganas	- do -
443	90/364	Human head with ornamented crown 5.3 x 4 cm.	Chandraketugarh, 24 Parganas	- do -
444	90/365	Fragment of a yaksha head 5.8 x 4.3 cm.	Chandraketugarh, 24 Parganas	- do -
445	90/366	Plaque : Upper part of a mithuna figure 13 x 9.5 cm.	Chandraketugarh, 24 Parganas	- do -
446	90/367	Plaque : Yakshi bust 10.5 x 9.6 cm.	Chandraketugarh, 24 Parganas	- do -
447	90/368	Plaque : Upper part of a dancing female figur 8.7 x 8.3 cm.	Chandraketugarh, 24 Parganas	- do -
448	90/369	Torso of a mother and child 13 x 8 cm.	Chandraketugarh, 24 Parganas	- do -
449	90/370	Plaque : Part of a male figure carrying a plate 11 x 6 cm.	Chandraketugarh, 24 Parganas	- do -
450	90/371	Plaque : Part of a female torso 8 x 7.8 cm.	Chandraketugarh, 24 Parganas	- do -
451	90/372	Plaque : A female hand and a small female figure is partly visible, 12.3 x 5.7 cm.	Chandraketugarh, 24 Parganas	- do -
452	90/373	Plaque : Female hand holding a fly-whisk 6.5 x 4.5 cm.	Chandraketugarh, 24 Parganas	- do -
453	90/374	Plaque : Floral motif 4.5 x 3.5 cm.	Chandraketugarh, 24 Parganas	- do -
454	90/375	Mould of a female figure 14 x 7.3 cm.	Chandraketugarh, 24 Parganas	- do -
455	90/376	Fragment of a sculptural mould 15.3 x 15 cm.	Chandraketugarh, 24 Parganas	13.3.1991
456	90/377	Mould depicting floral decorations 15.2 x 13.5 cm.	Chandraketugarh, 24 Parganas	- do -
457	90/378	Decorated plaque 13.2 x 7 cm.	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
458	90/379	Plaque : Floral design 11.2 x 11 cm.	Chandraketugarh, 24 Parganas	- do -
459	90/380	Rattle : Headless, nude, seated male figure 10 cm. in height	Chandraketugarh, 24 Parganas	- do -
460	90/381	Mould : Stars, dots, leaves, etc. 5.5 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
461	90/382	Rattle : Nude, seated male 10.5 x 5 cm.	Chandraketugarh, 24 Parganas	- do -
462	90/385a, b, c, d	Four fragments of a plaque showing floral designs and part of a human head 11 x 10, 8 x 6, 16.5 x 10.6, 12 x 11 cms. respectively	Chandraketugarh, 24 Parganas	- do -
463	90/386a, b, c	Three fragments of a plaque showing yaksha head, tree, bird etc. 10.5 x 7.5, 5.3 x 5, 8 x 4.5 cms. respectively	Chandraketugarh, 24 Parganas	- do -
464	90/387	Plaque : Upper part of a male figure 8.5 x 5 cm.	Chandraketugarh, 24 Parganas	- do -
465	90/388	Plaque : Female hand and a parrot 7.5 x 5 cm.	Chandraketugarh, 24 Parganas	- do -
466	90/389	Plaque : Peacock and floral motif 9 x 7 cm.	Chandraketugarh, 24 Parganas	- do -
467	90/392	Plate stamped with decorative motif 17.5 x 5 cm.	Chandraketugarh, 24 Parganas	- do -
468	90/393	Ring (broken) 3.5 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
469	90/399	Ear plug 4.2 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
470	90/400	Ear plug 3 cm. in diameter	Chandraketugarh, 24 Parganas	13.3.1991
471	90/401	Ear plug 1.8 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
472	90/402	Ear plug 3.8 cm. in diameter	Chandraketugarh, 24 Parganas	- do -



<i>Sl. No.</i>	<i>Acc No.</i>	<i>Description with size</i>	<i>Findspot</i>	<i>Date of entry</i>
473	90/403	Ear plug 3 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
474	90/404	Ear plug 2.8 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
475	90/405	Ear plug 1.9 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
476	90/406	Ear plug 1.8 cm. in diameter	Chandraketugarh, 24 Parganas	- do -
477	91/7	Plaque : Mother and child damaged 19.5 x 10.5 cm.	Harinarayanpur, 24 Parganas	27.2.1992
478	91/19	Bust of a female figure 10.7 x 8.9 cm.	Harinarayanpur, 24 Parganas	20.2.1992
479	13743/A22553	Brick : Radha-Krishna 13.5 x 7.5 cm.	Baharampur, Murshidabad	23.4.1957
480	NS4978	Lakshmi 15 cm. in height	Bishnupur, Bankura, West Bengal	18.5.1925
481	13695/A22557	Carved brick : Gangavatarana 19 x 12 cm.	Birbhum, West Bengal	25.2.1957
482	13696/A22558	Carved brick : Three ladies 20 x 12 cm.	Birbhum, West Bengal	- do -
483	96/1	Durga 157 x 122 cm.	Kirnahar, Birbhum, West Bengal	
484	71/22	Diagonal plaque : lady with flowers 19.3 x 10 cm.	Bengal	19.3.1971
485	71/23	Diagonal plaque : Human figure 18.8 x 10 cm.	Bengal	- do -
486	73/2	Krishna blowing flute 33.3 cm. in height	Bengal	7.1.1973
487	73/3	Haladhara Balarama 31.5 cm. in height	Bengal	- do -
488	73/4	Siva 32.5 cm. in height	Bengal	- do -
489	73/5	Parvati 29 cm. in height	Bengal	- do -



## Terracotta Art of Western Deccan

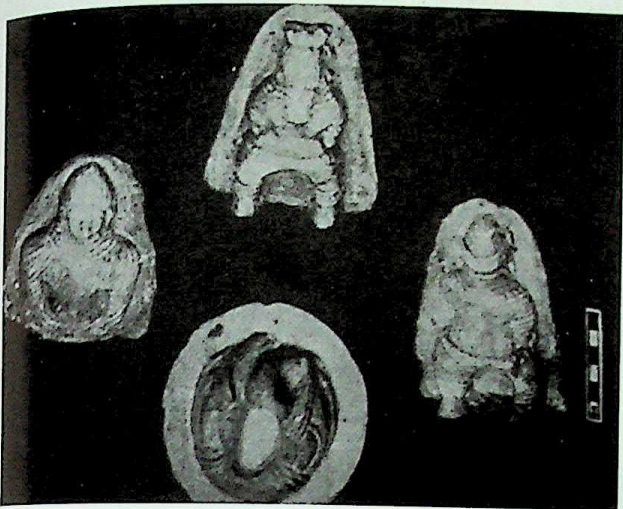


Fig. 1 : Yeleswaram, double mould Terracotta (obverse)

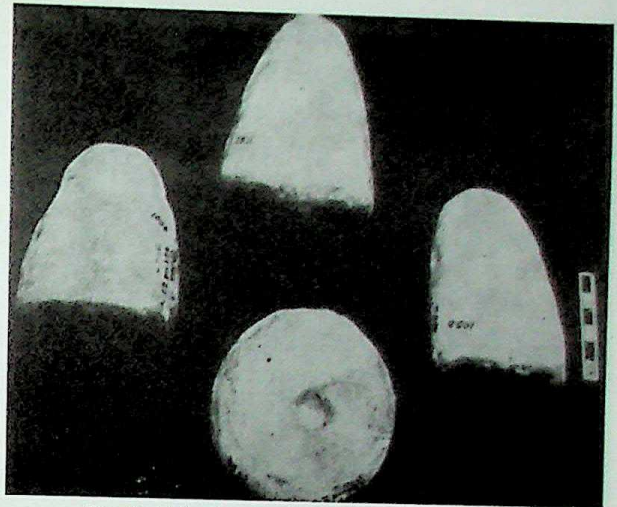


Fig. 2 : Yeleswaram, double mould Terracotta



Fig. 3 : Ter, Male figures Terracotta





Fig. 4 : Ter, Male figures Terracotta



Fig. 4A : Kondapur Male figure  
Terracotta



Fig. 5 : Kausan (near Paithan) Male Figure Terracotta





Fig. 6 : Sannati Male figures, Terracotta



Fig. 8 : Nevasa, boy heads, Kaolin



Fig. 7 : Ter, Male figure on top of suspension lamp, Terracotta





Fig. 9 : Brahmapuri (Kolhapur),  
Female figure, Terracotta

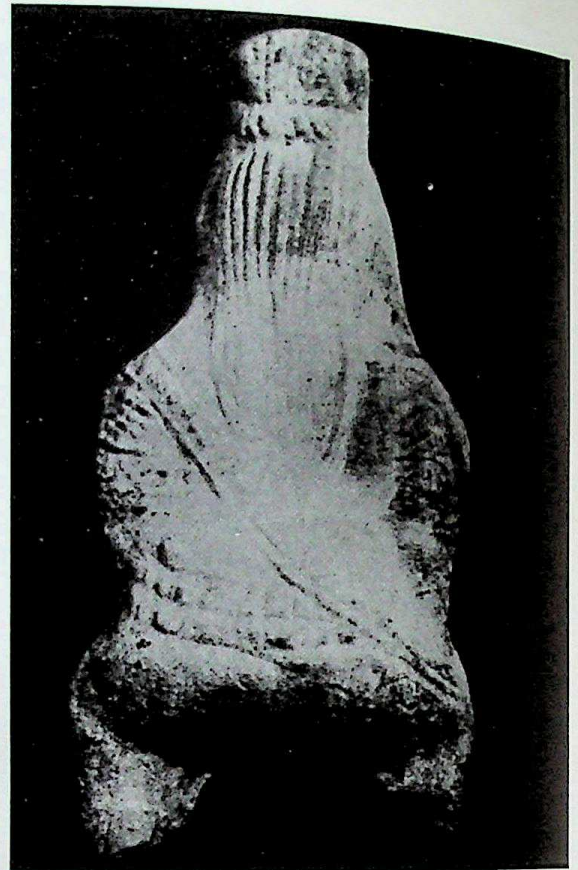


Fig. 9A : Brahmapuri (Kolhapur),  
Female figure Terracotta (back view)

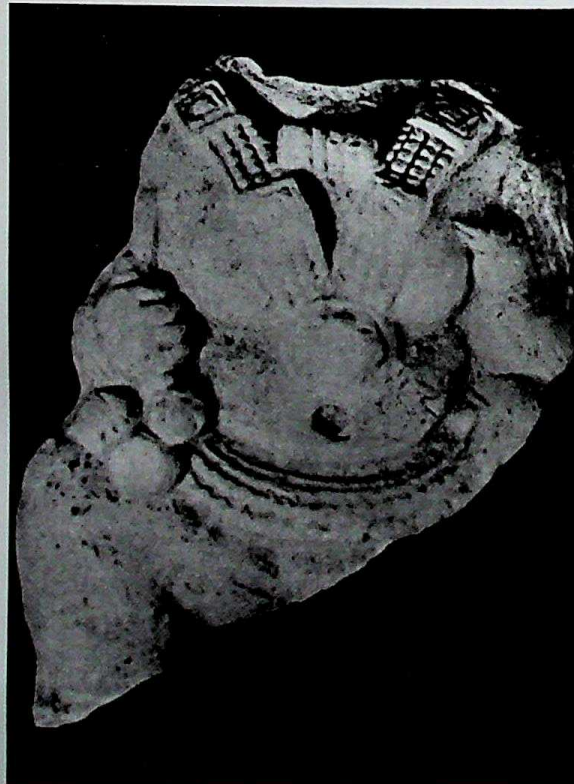


Fig. 10 : Peddabankur Mother Goddess figure, Terracotta





Fig. 11 : Ter, Female heads, Terracotta (front & back)

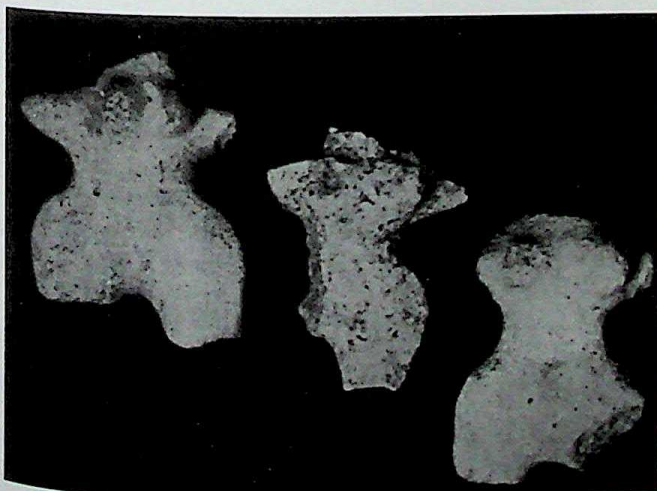


Fig. 13 : Peddabankur Female figures  
(archait) Terracotta

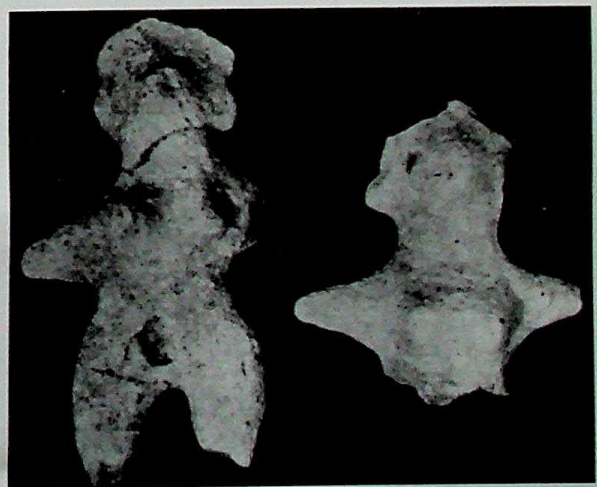


Fig. 14 : Peddabankur Female figures  
with circular holo at back, Terracotta



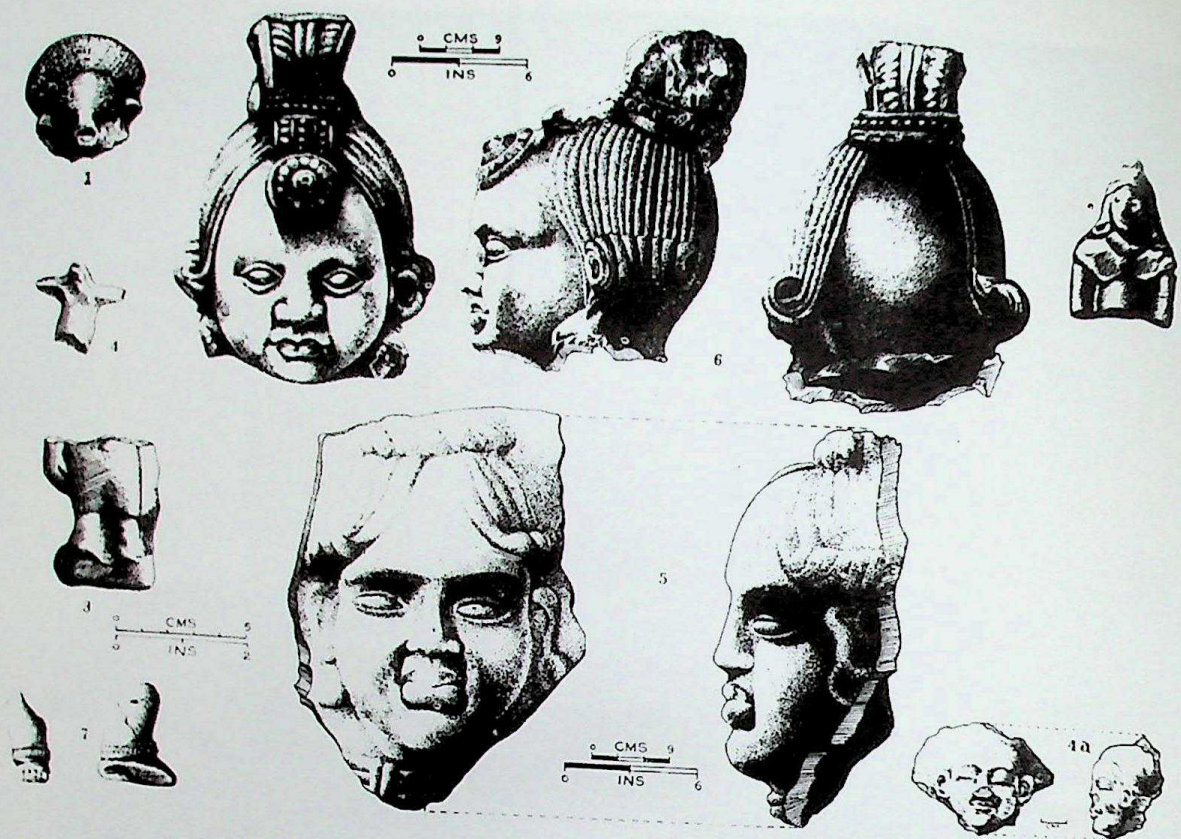


Fig. 12A : Nevasa, Female heads, Terracotta (front and back)



Fig. 12 : Ter, Female heads, Terracotta (front & back)





Fig. 15 Yeleswaram, Moulds with casts, human figurines, Terracotta

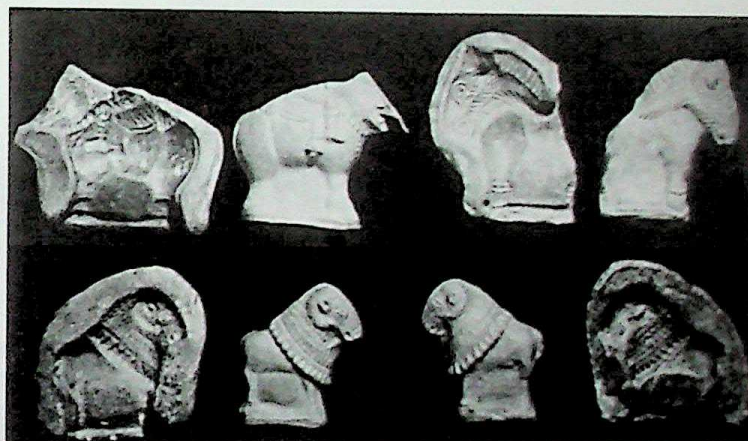


Fig. 16 Yeleswaram, Moulds with casts, Animal figures, Terracotta



Fig. 17 : Peddabankur Female Figure with lifted hands, Terracotta



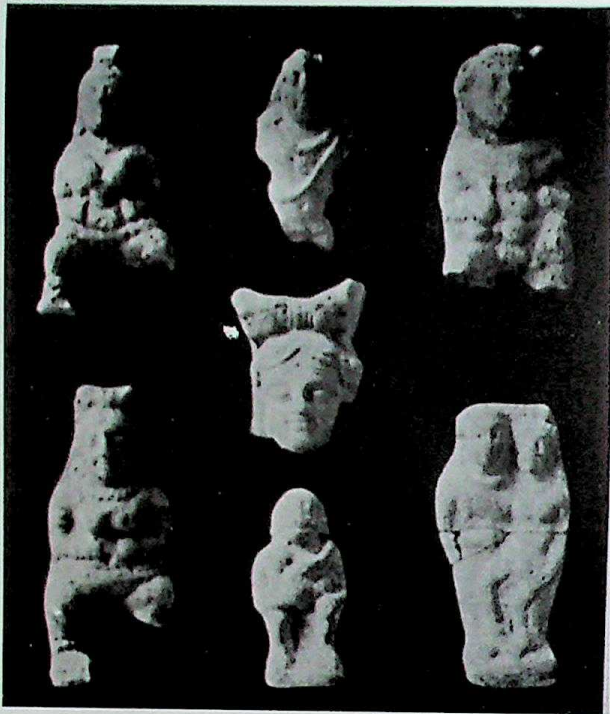


Fig. 18 : Nagarjuna Konda Male & Female figures Terracotta

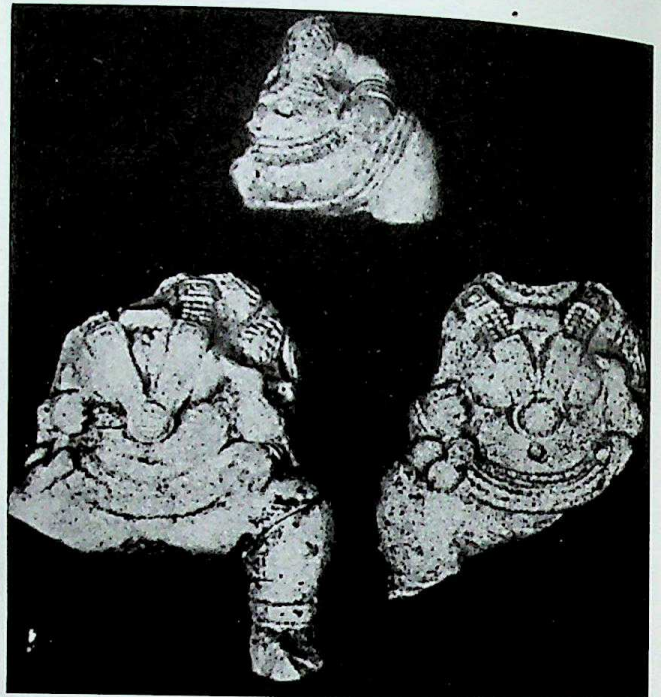


Fig. 19 : Peddabankur Female Figurines Terracotta



Fig. 20 : Dhulikatta Female figure, Terracotta

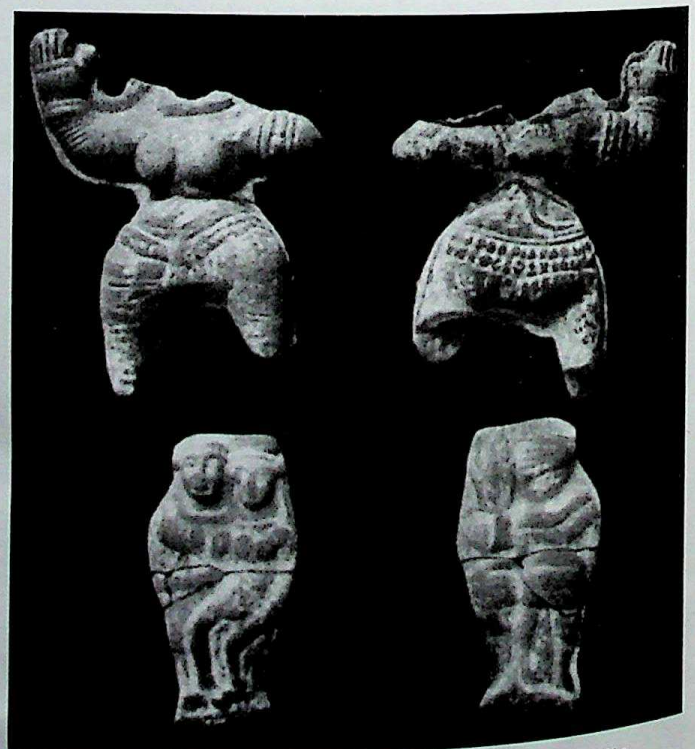


Fig. 18A : Nagarpinakonda Female Figures, Terracotta



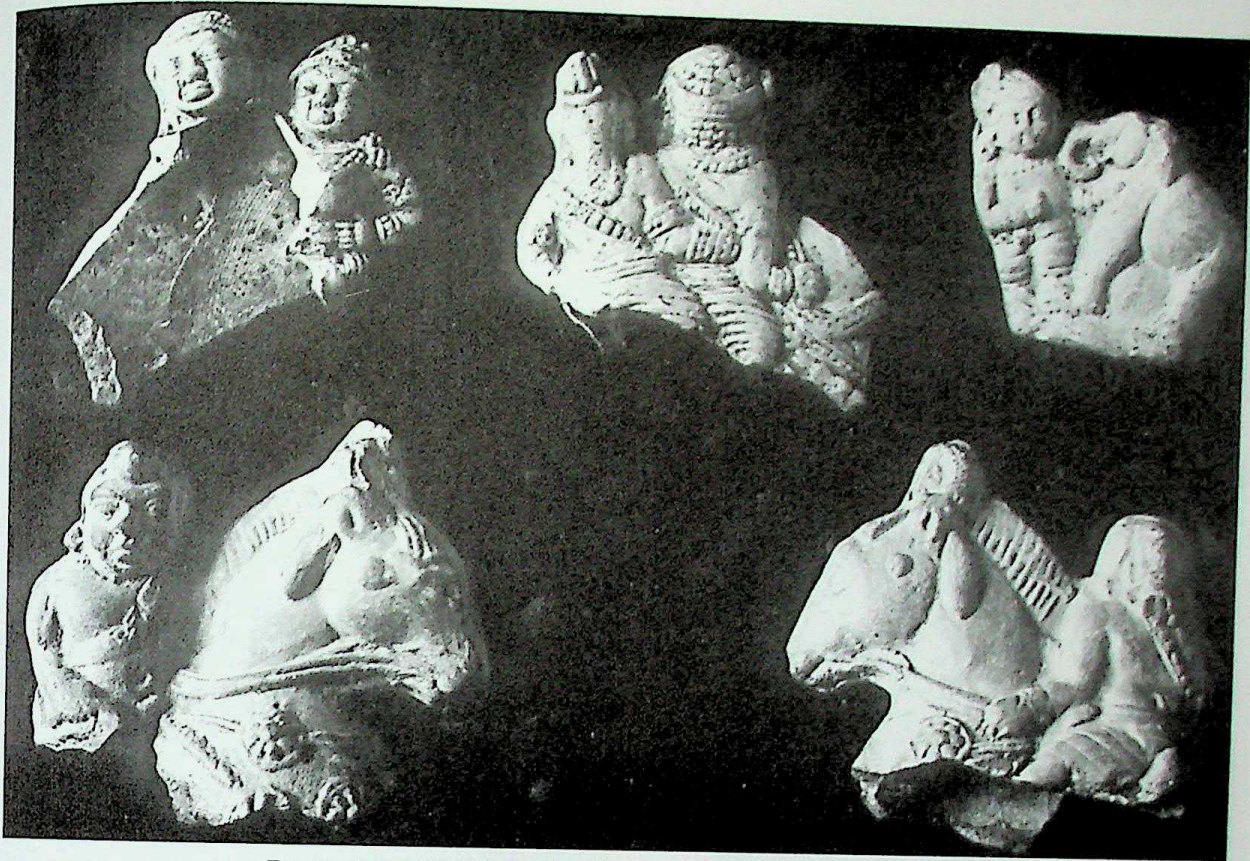


Fig. 21 : Ter, male and female riders on horse and elephants, Terracotta



Fig. 22 : Ter, male and female figures, Terracotta



Terracottas of Mid Eastern India with special reference to Bihar



Fig. 1 : Female Figure, Pataliputra



Fig. 2 : Dancing Girl, Pataliputra





Fig. 4 : Torso of Female Figure, Pataliputra



Fig. 3 : Smiling Boy, Pataliputra





Fig. 5 : Head, Buxar



Fig. 6 : Head, Buxar



Fig. 7 : Female figurine, Buxar



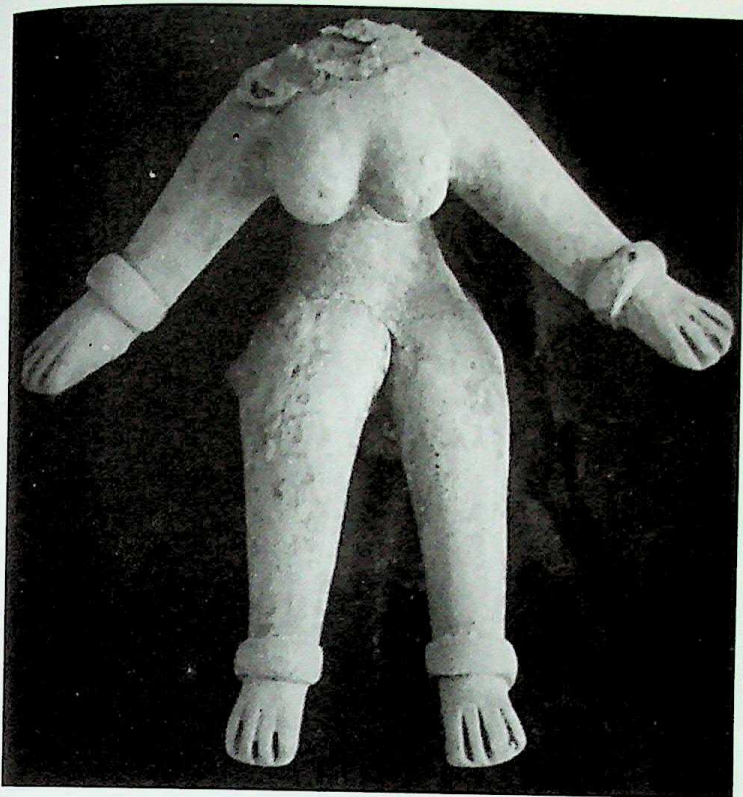


Fig. 8 : Headless female figurine, Buxar



Fig. 9 : Female figurine, playing a *Tabala*, Buxar



Fig. 10 : Squa Hing Figure, Pataliputra





Fig. 12 : Mañjuśrī from Antichak



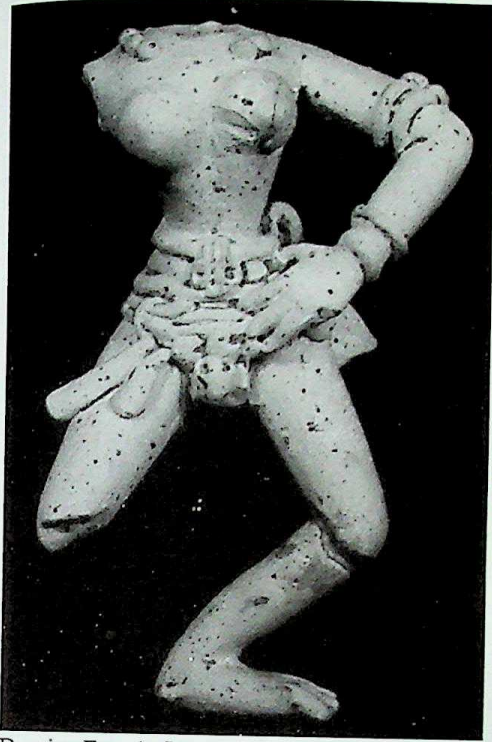
Fig. 13 : A lady applying Vermillion Antichak



Fig. 11 : Terracotta Ramayana Scene,  
Chausa, Bhojpur, Gupta Period



# The Art of Terracotta in N. E. India with special reference to Assam - A Survey



Dancing Female figure  
Ambari, Guwahati, 8th - 9th century



Dancing Siva Devotee  
Chenikuthi, Guwahati



Kaumari, Cotton College Campus, Guwahati



Stamped figure of Buddha Guwahati (Now in A.S.M.)





Indrani, Cotton College Campus, Guwahati.



Dancing ascetic, Bhaitbari, Meghalaya



A female seated figure, Cotton College Campus, Guwahati.



An Ascetic tantrik, Bhaitbari, Guwahati.

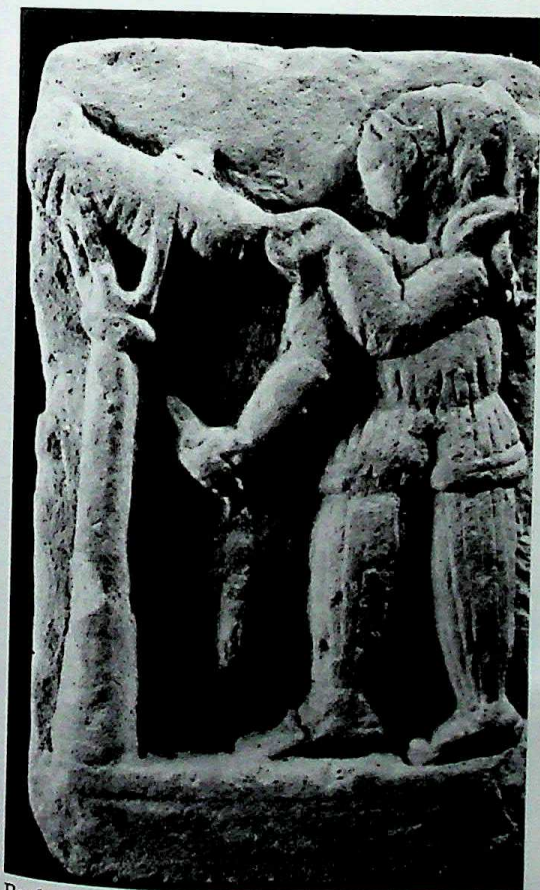




Vidyadhara, Cotton College Campus, Guwahati.



Ascetic pregnant woman, Bhaitbari, Meghalaya

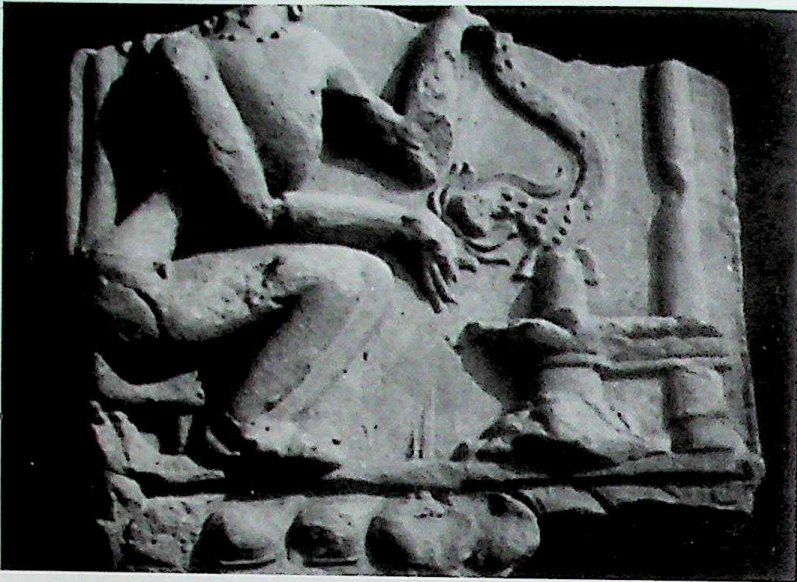


Baghpara Garo Hills, Meghalaya



A women figure, Rukmini Nagar





Parvati worshipping Śivalinga, Cotton College Campus, Guwahati.



Baghapara, Garo Hills



A row of Calf, Baghapara, Meghalaya



Baghapara, Garo Hills



## Medieval Terracottas Of North Bengal A Critique

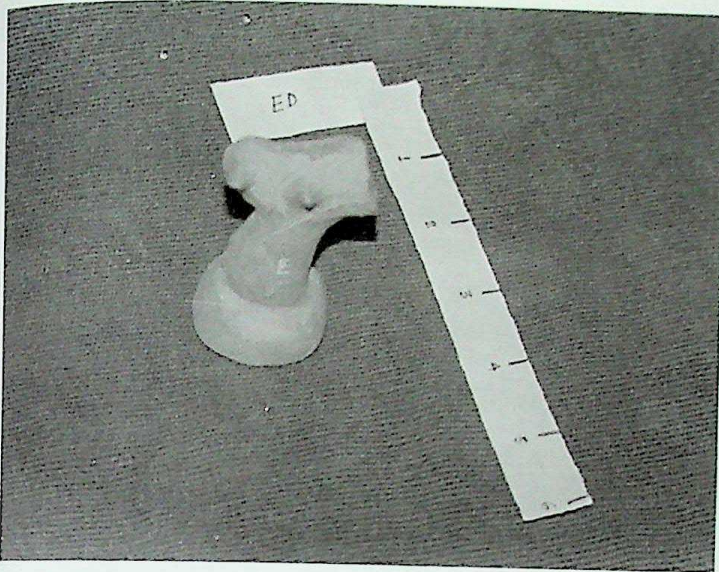


Fig. 1 Bust of a Female

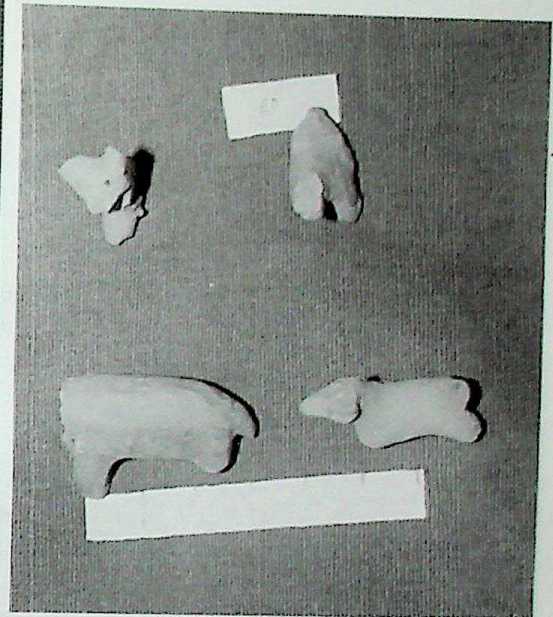


Fig. 2 Animal Figurines

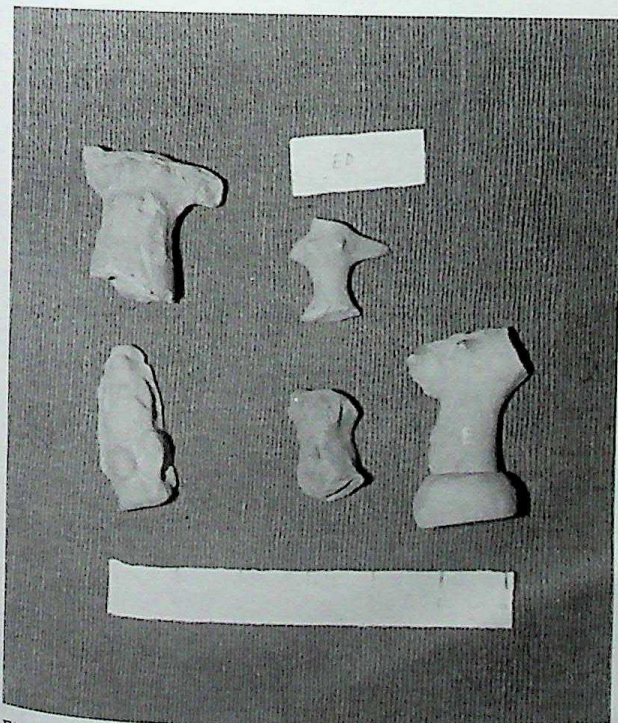


Fig. 3 Human and Animal Figurines

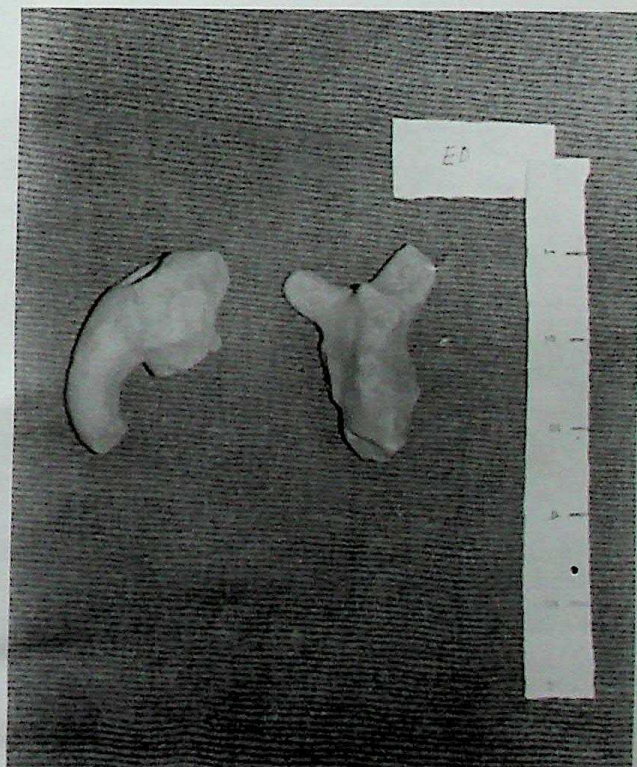


Fig. 4 Fragmentary Animal Figurines



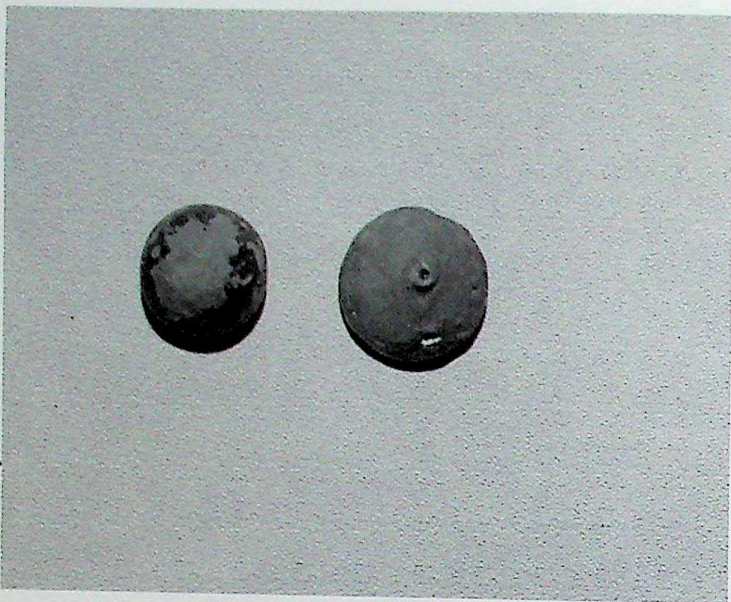


Fig. 5 Game Objects

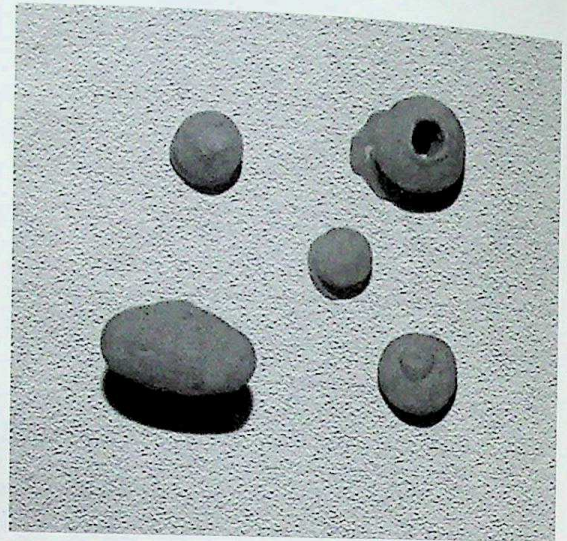


Fig. 6 Game Objects

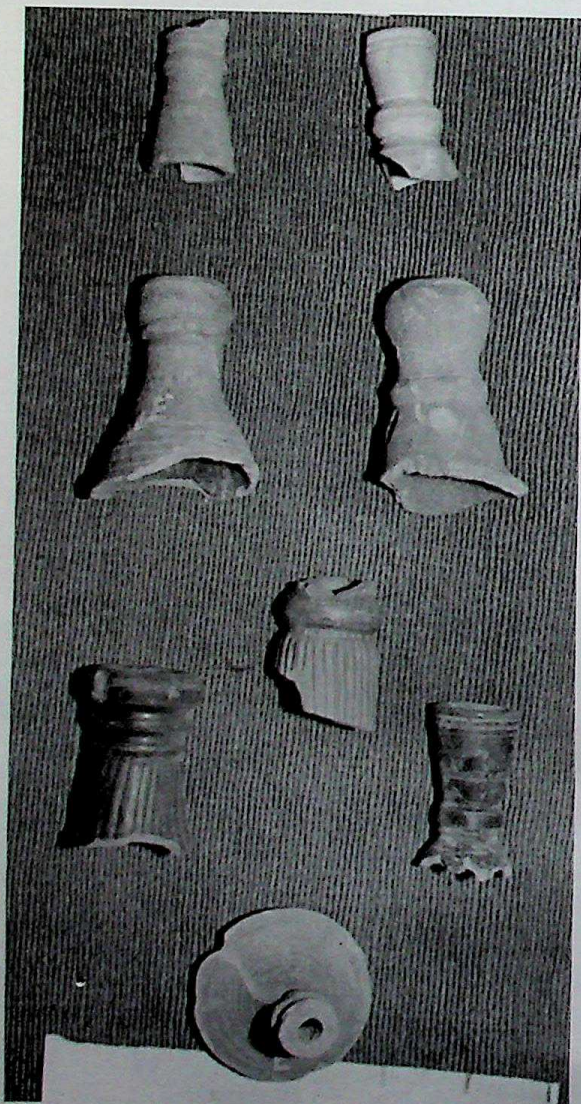


Fig. 7 Miscellaneous Objects

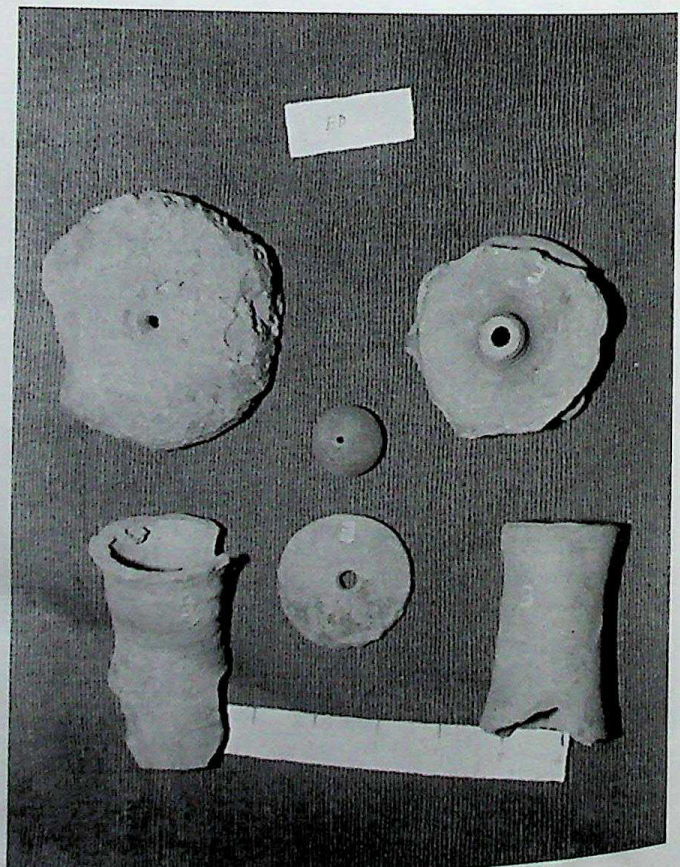


Fig. 8 Miscellaneous Objects



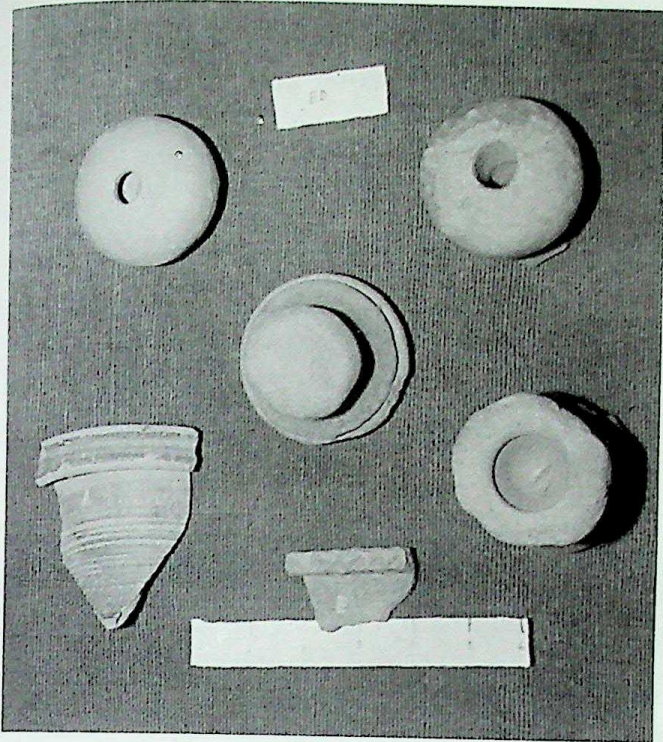


Fig. 9 Miscellaneous Objects

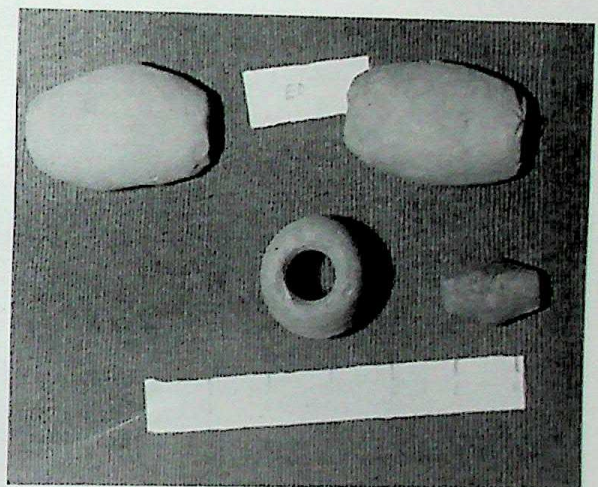


Fig. 10 Miscellaneous Objects



Fig. 11 Terracotta Plaques with figurines





Fig. 12 Terracotta Plaques with figurines



Fig. 14 Designed Brick works

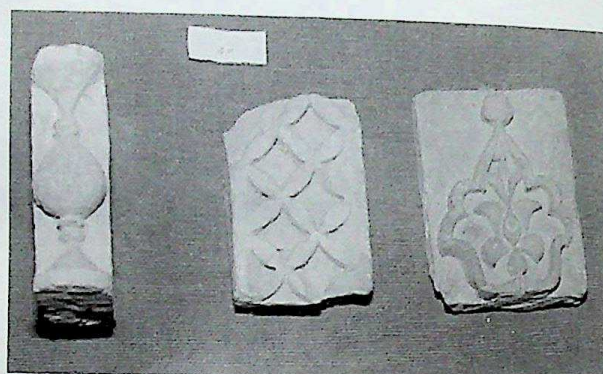


Fig. 13 Designed Brick works

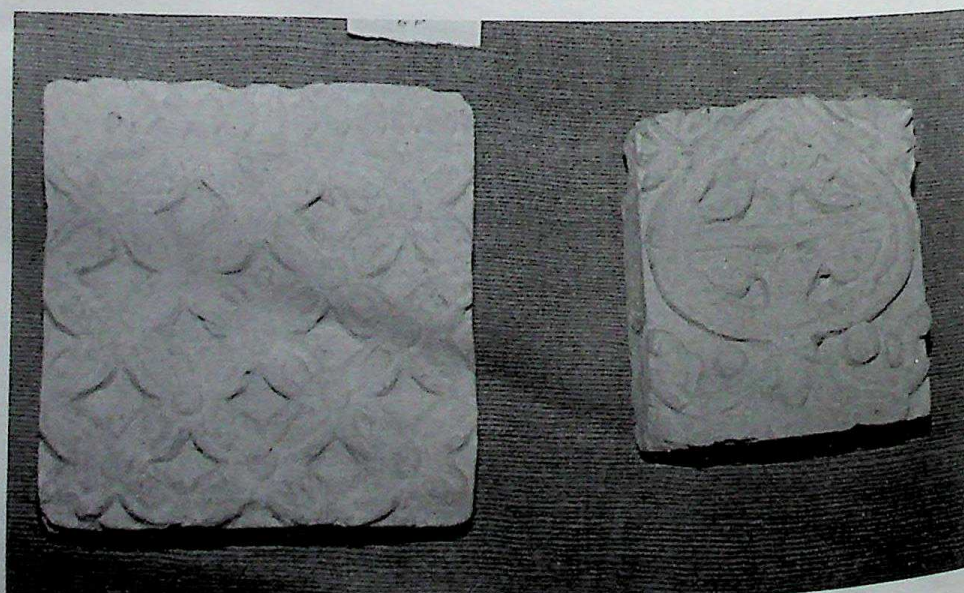


Fig. 15 Designed Brick works





Fig. 16 Designed Brick works

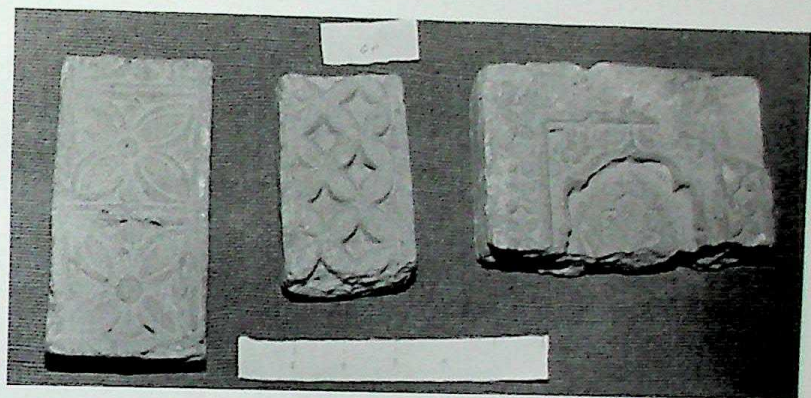


Fig. 17 Designed Brick works

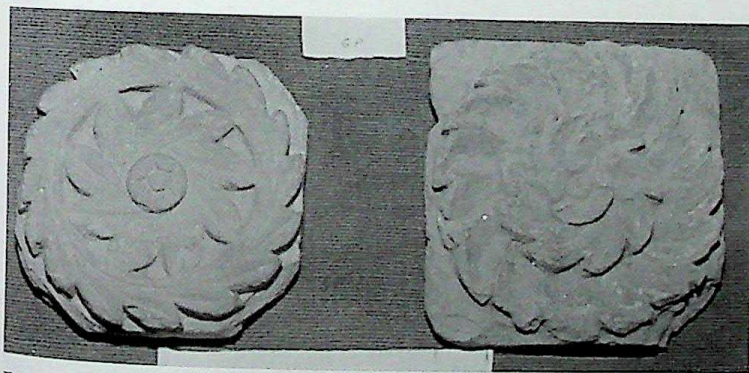


Fig. 18 Designed Brick works

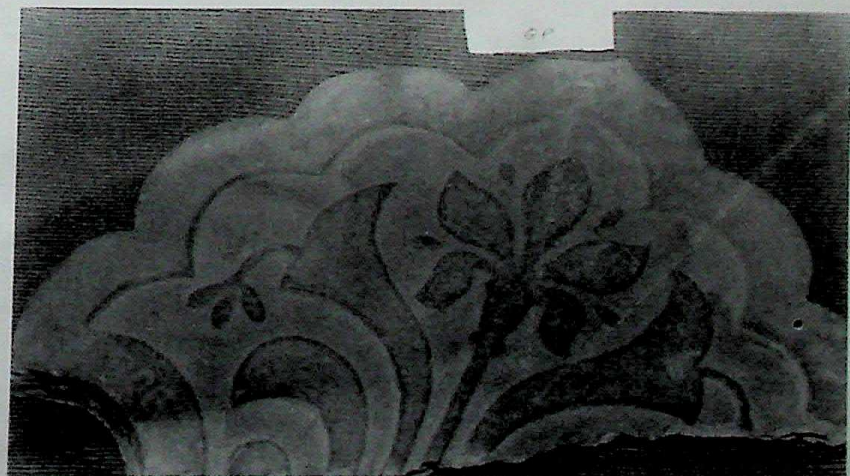


Fig. 19 Designed Brick works



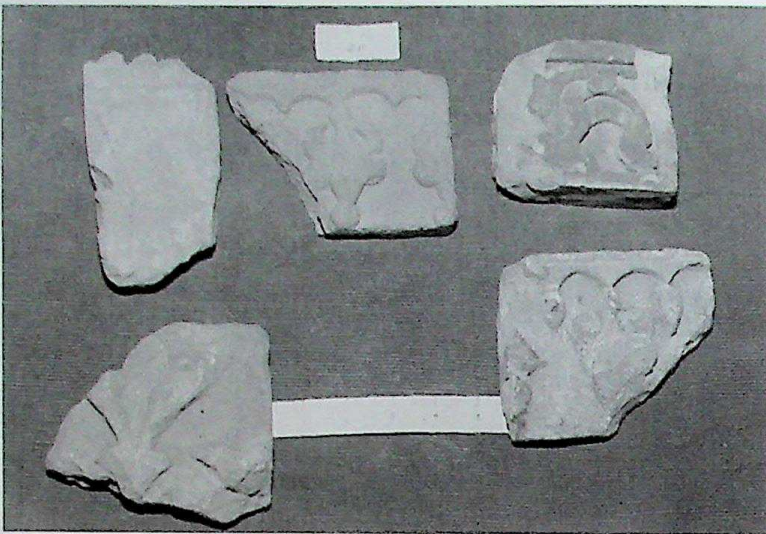


Fig. 20 Designed Brick works

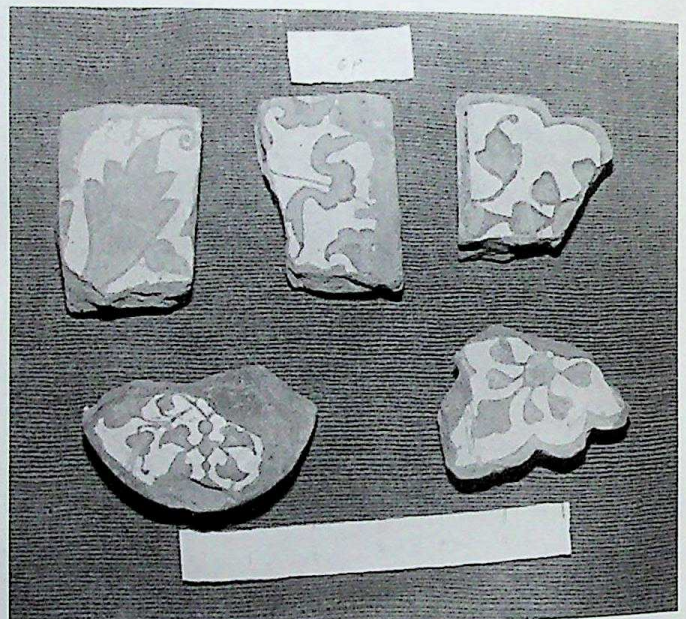


Fig. 21 Painted Bricks

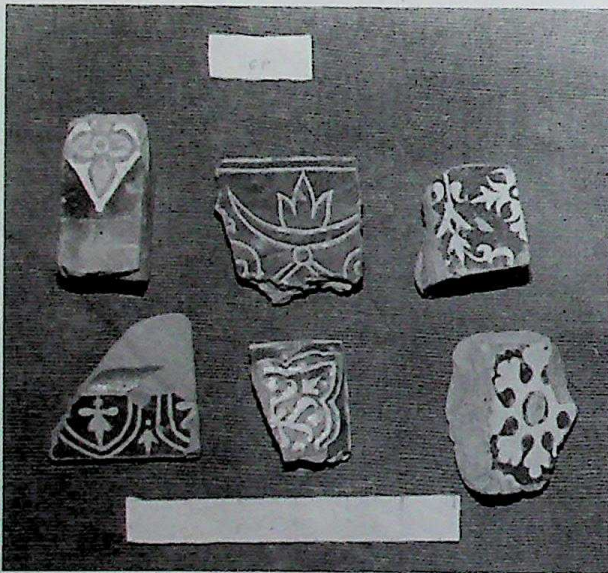


Fig. 22 Painted Bricks

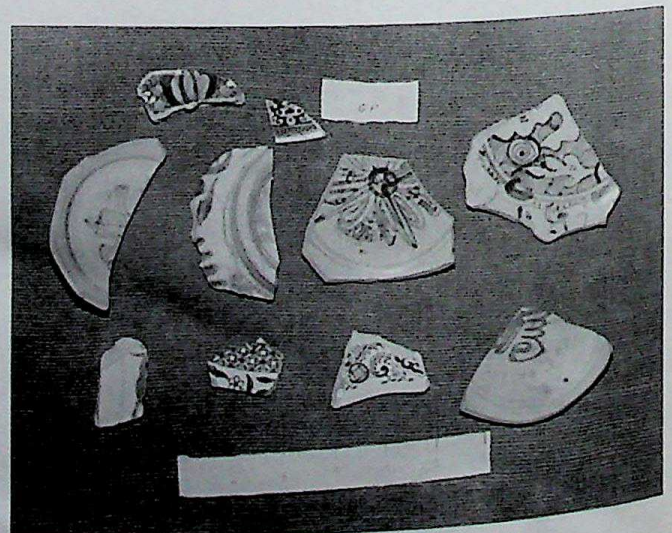


Fig. 23 Designed Ceramic works



# A Note on Terracotta Ramayana Panel in the Collection of Indian Museum



Terracotta Ramayana Panel

## Ornaments in the Terracotta Figurines in Early Bengal

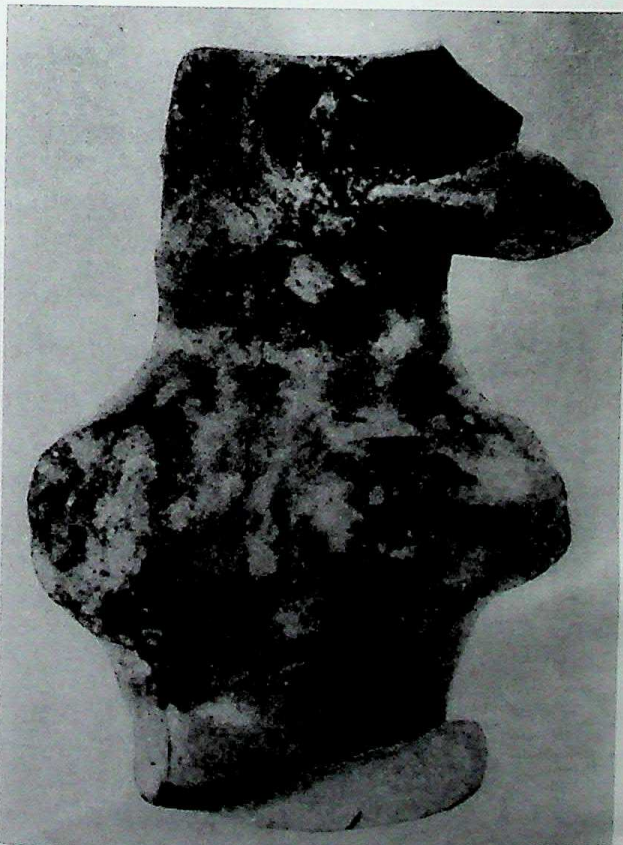


Fig. 1a : Pandu Rajar Dhibi



Fig. 1b: Tamluk





Fig. 1c : Chandraketugarh



Fig. 1d :

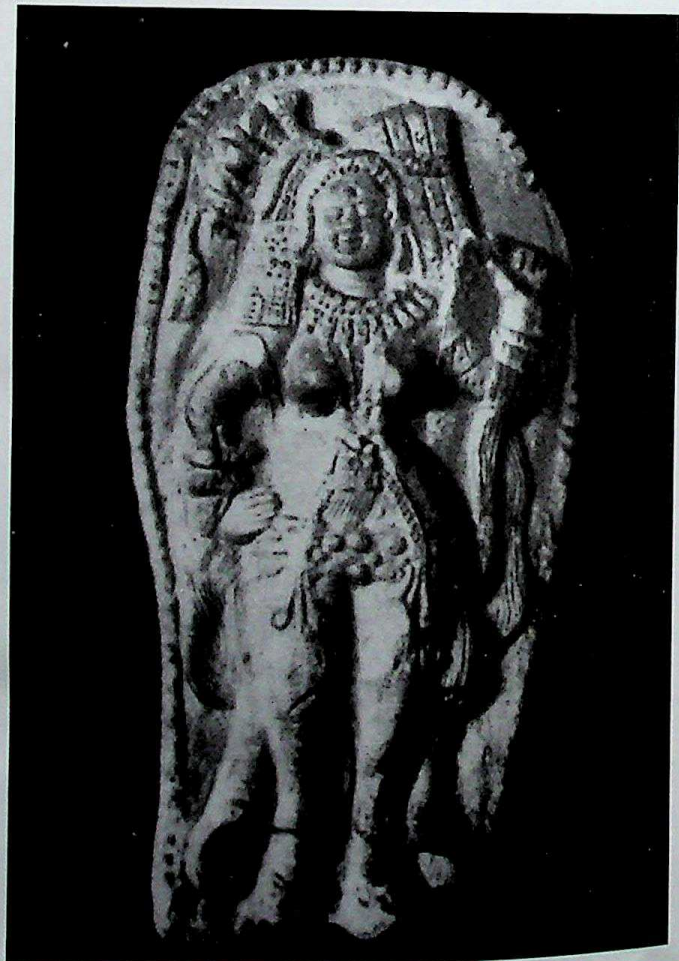


Fig. 11 a





Fig. II b



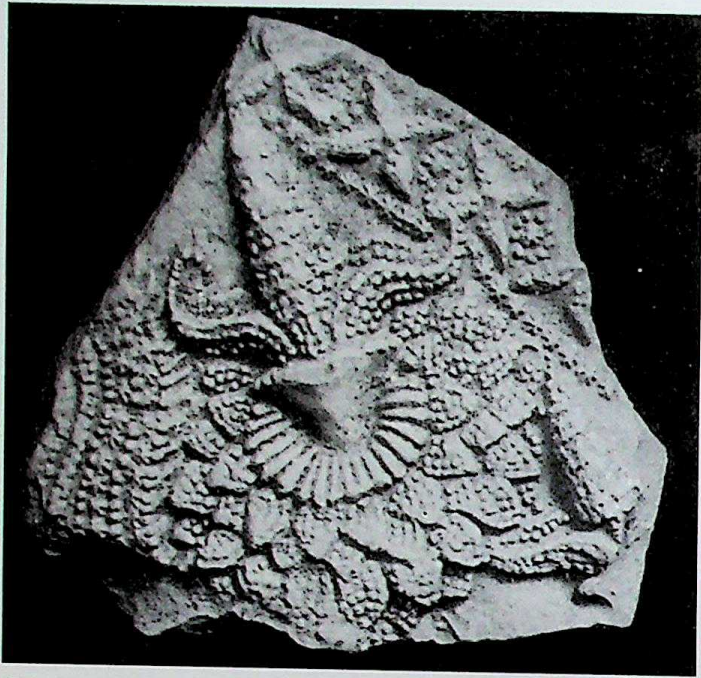
Fig. IIc :



Fig. IId :



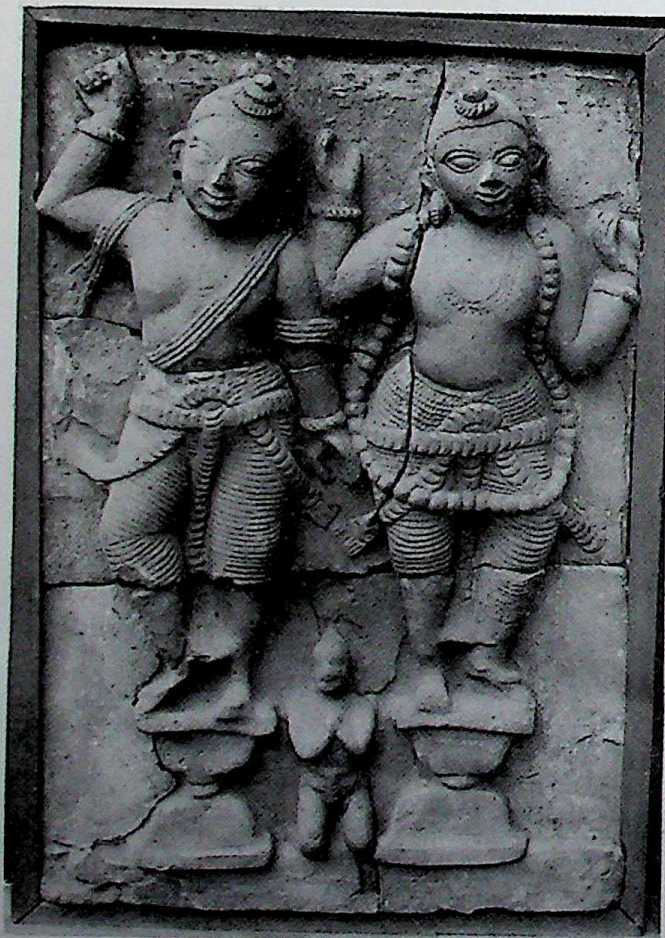
## Bengal Terracottas in the Indian Museum



Floral motif c. 2nd Cent BC, Chandraketugarh



Horse rider c. 17th Cent. AD, Masjidbati

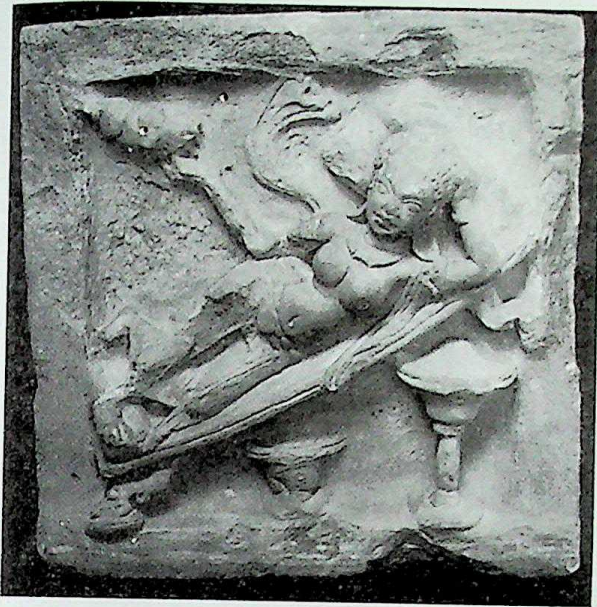


Gaur Nitai c. 18th Cent. AD, Midnapore



Lady with flowers c. 18th Cent. AD, Bankura





Maya's dream c. 8th Cent. AD, Paharpur



Lady doing hair-Mainamati c. 7th Century AD



Man playing damaru-Mainamati, c. 8th Century AD



Yakshi bust c. 2nd Cent BC, Chandraketurgarh





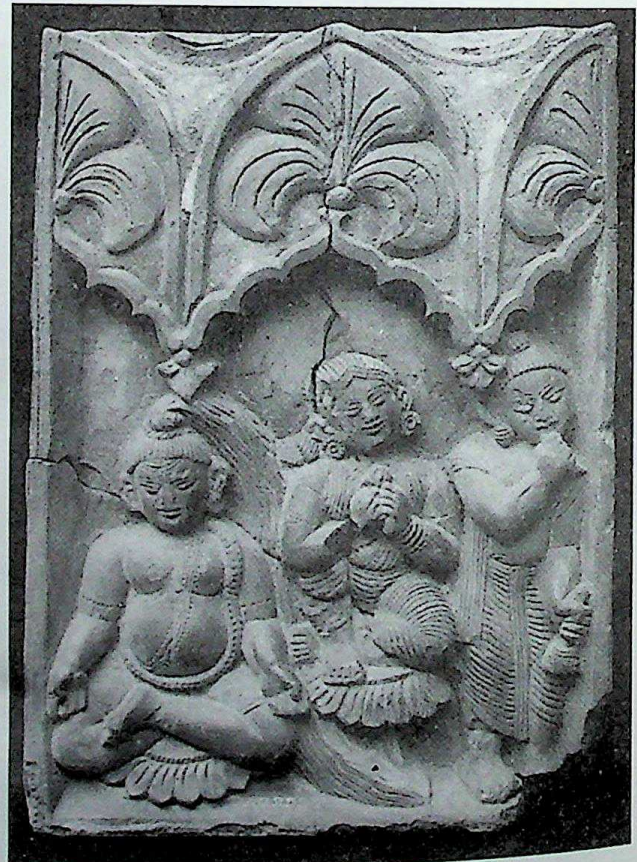
Manjusri - Paharpur, 8th Century AD



Travelling mendicant c. 8th Cent. AD, Paharpur



Bearded male c. 17th Cent. AD, Mahasthan



Gangavatarana c. 18th Cent. AD, Birbhum



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